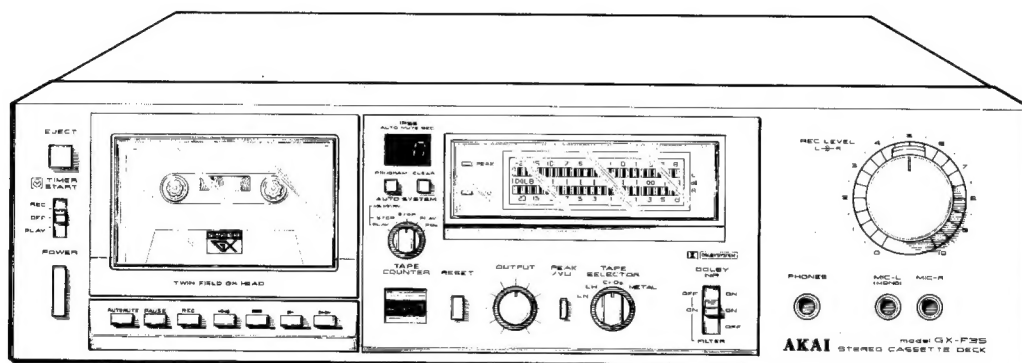


# AKAI SERVICE MANUAL



STEREO CASSETTE DECK

MODEL **GX-F35**



## STEREO CASSETTE DECK

### MODEL **GX-F35**

THIS MODEL IS APPLICABLE TO BOTH SILVER AND BLACK PANEL MODEL

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## SECTION 1

# SERVICE MANUAL

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For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

## I. TECHNICAL DATA

TRACK SYSTEM	4 Track 2 Channel Stereo System
TAPE	Philips Type Cassette
TAPE SPEED	4.76 cm/s $\pm$ 1.0% (1-7/8 ips. $\pm$ 1.0%)
HEADS	Erase head $\times$ 1 Twin Field Super GX head for Record/Playback $\times$ 1
MOTORS	Electronically speed controlled DC motor for capstan drive $\times$ 1 DC motor for reel drive $\times$ 1
WOW & FLUTTER	Less than 0.04% WRMS, 0.11% (DIN 45500)
TAPE WINDING TIME	80 sec. using a C-60 cassette tape
FREQUENCY RESPONSE	LN: 30 to 15,000 Hz $\pm$ 3 dB (-20 VU) LH: 30 to 16,000 Hz $\pm$ 3 dB (-20 VU) CrO <sub>2</sub> : 30 to 16,500 Hz $\pm$ 3 dB (-20 VU) 30 to 9,000 Hz $\pm$ 3 dB (0 VU) Metal: 30 to 19,000 Hz $\pm$ 3 dB (-20 VU) 30 to 13,000 Hz $\pm$ 3 dB (0 VU)
SIGNAL TO NOISE RATIO	LN: Better than 58 dB LH: Better than 58 dB CrO <sub>2</sub> : Better than 60 dB Metal: Better than 60 dB (Measured via tape with peak recording level) Dolby NR switch ON: Improves up to 10 dB above 5 kHz
HARMONIC DISTORTION	LN: Less than 0.8% LH: Less than 0.8% CrO <sub>2</sub> : Less than 0.7% Metal: Less than 0.7%
INPUT	MIC: 0.25 mV (input impedance 5.0 kohms) Required microphone impedance: 600 ohms Line: 70 mV (input impedance 47 kohms)
OUTPUT	Line: 410 mV at 0 VU Required load impedance: more than 20 kohms Phone: 100 mV/8 ohms at 0 VU
DIN	Input: 2 mV (input impedance 10 kohms) Output: 410 mV Required load impedance: more than 20 kohms
POWER REQUIREMENTS	100V, 50/60 Hz for JPN 120V, 60 Hz for U.S.A. and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V/120V/220V/240V, 50/60 Hz internally switchable for other countries.
POWER CONSUMPTION	JPN . . . . . 24W U/T, AAL, CSA . . . . . 25W
DIMENSIONS	440(W) $\times$ 118(H) $\times$ 285(D) mm (17.3 $\times$ 4.6 $\times$ 11.2")
WEIGHT	6.9 kg (15.2 lbs)

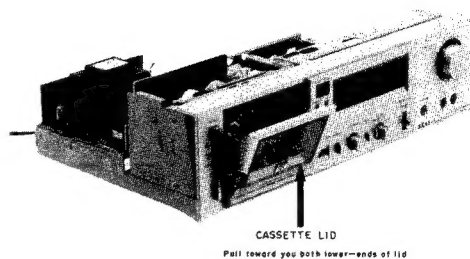
\*For improvement purpose, specifications and design are subject to change without notice.

\*"Dolby" and the Double D system are trademarks of Dolby Laboratories. (Manufactured under license from Dolby Laboratories).

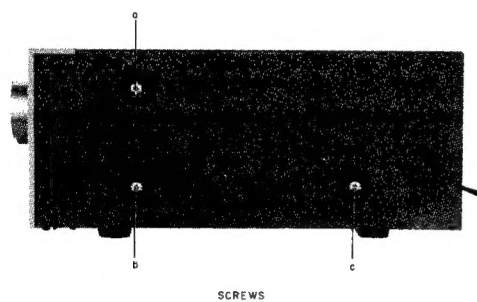
## II. DISMANTLING OF UNIT

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

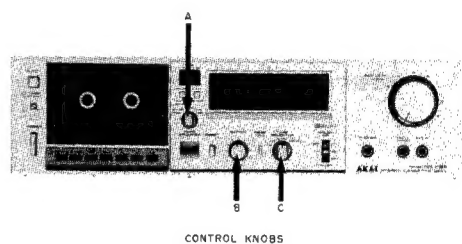
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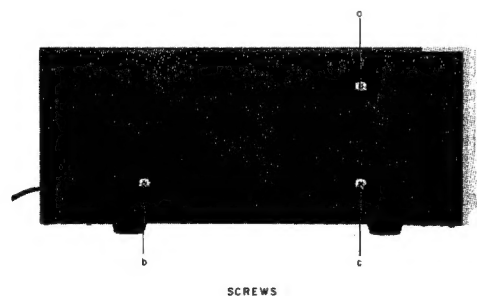
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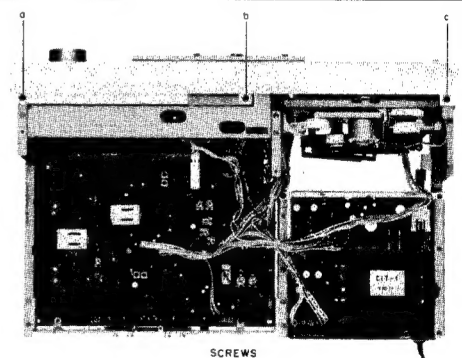
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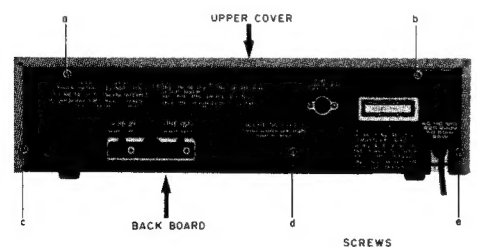
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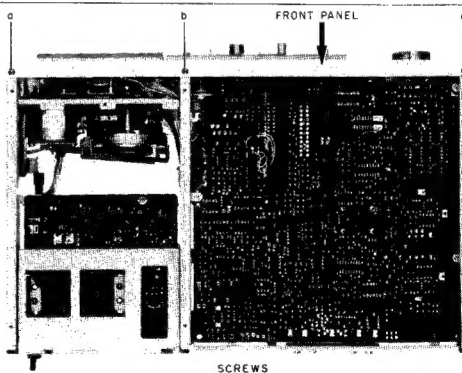
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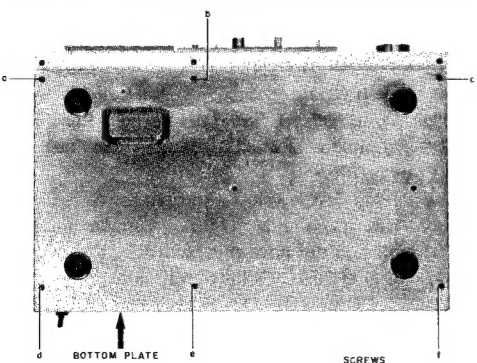
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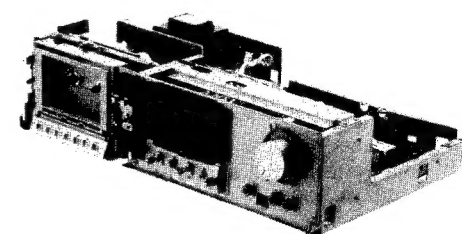
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4



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### III. CONTROLS

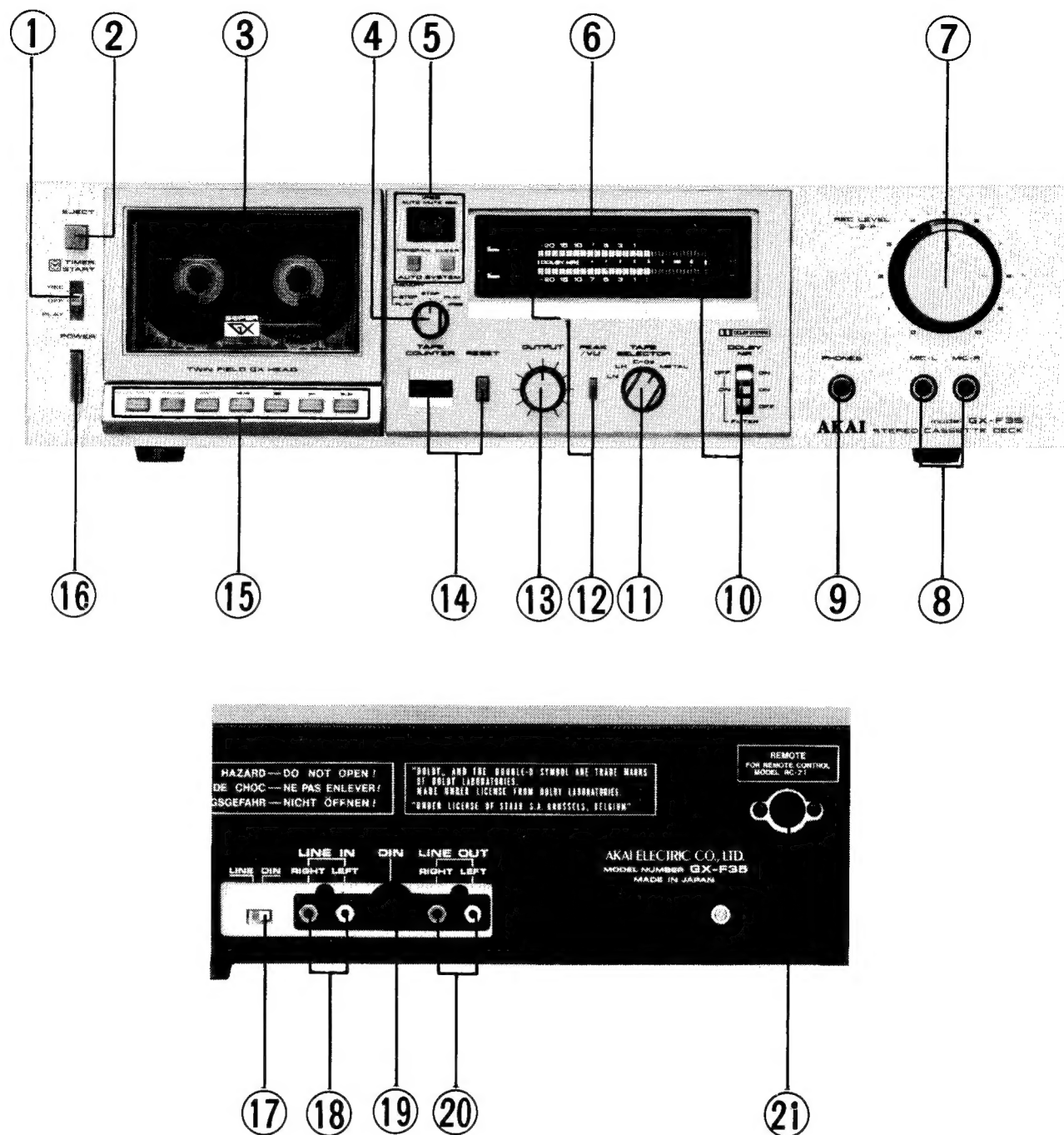


Fig. 1 Controls

- |  |  |
|--|--|
| 1. TIMER START SWITCH                                    | 11. TAPE SELECTOR  |
| 2. EJECT BUTTON  | 12. PEAK/VU SELECTOR AND INDICATOR   |
| 3. CASSETTE RECEPTACLE                                   | 13. OUTPUT CONTROL   |
| 4. AUTO SYSTEM SELECTOR                                  | 14. TAPE COUNTER AND RESET BUTTONS   |
| 5. IPSS/AUTO MUTE SEC DISPLAY, PROGRAM AND CLEAR BUTTONS | 15. OPERATING BUTTONS  |
| 6. FL DISPLAY BAR METERS WITH PEAK HOLD                  | 16. POWER SWITCH   |
| 7. LEFT-RIGHT RECORDING LEVEL CONTROLS                   | 17. INPUT SELECTOR SWITCH (The JPN, U.S.A., Canada and U/T models do not have this facility) |
| 8. MICROPHONE JACK (left and right)                      | 18. LINE INPUT JACKS (left and right)  |
| 9. HEADPHONES JACK                                       | 19. DIN JACK (The JPN, U.S.A., Canada and U/T models do not have this facility)              |
| 10. DOLBY NR AND FILTER SWITCH AND INDICATOR             | 20. LINE OUTPUT JACKS (left and right)   |
|  | 21. REMOTE CONTROL JACK  |

## IV. PRINCIPAL PARTS LOCATION

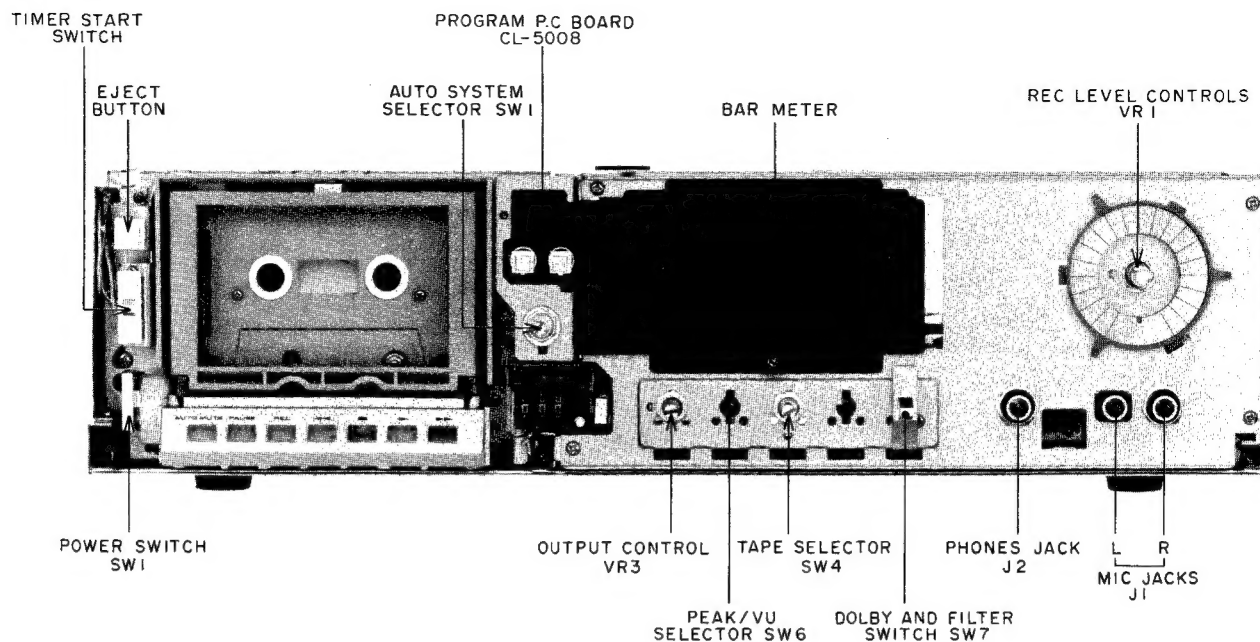


Fig. 2 Front View

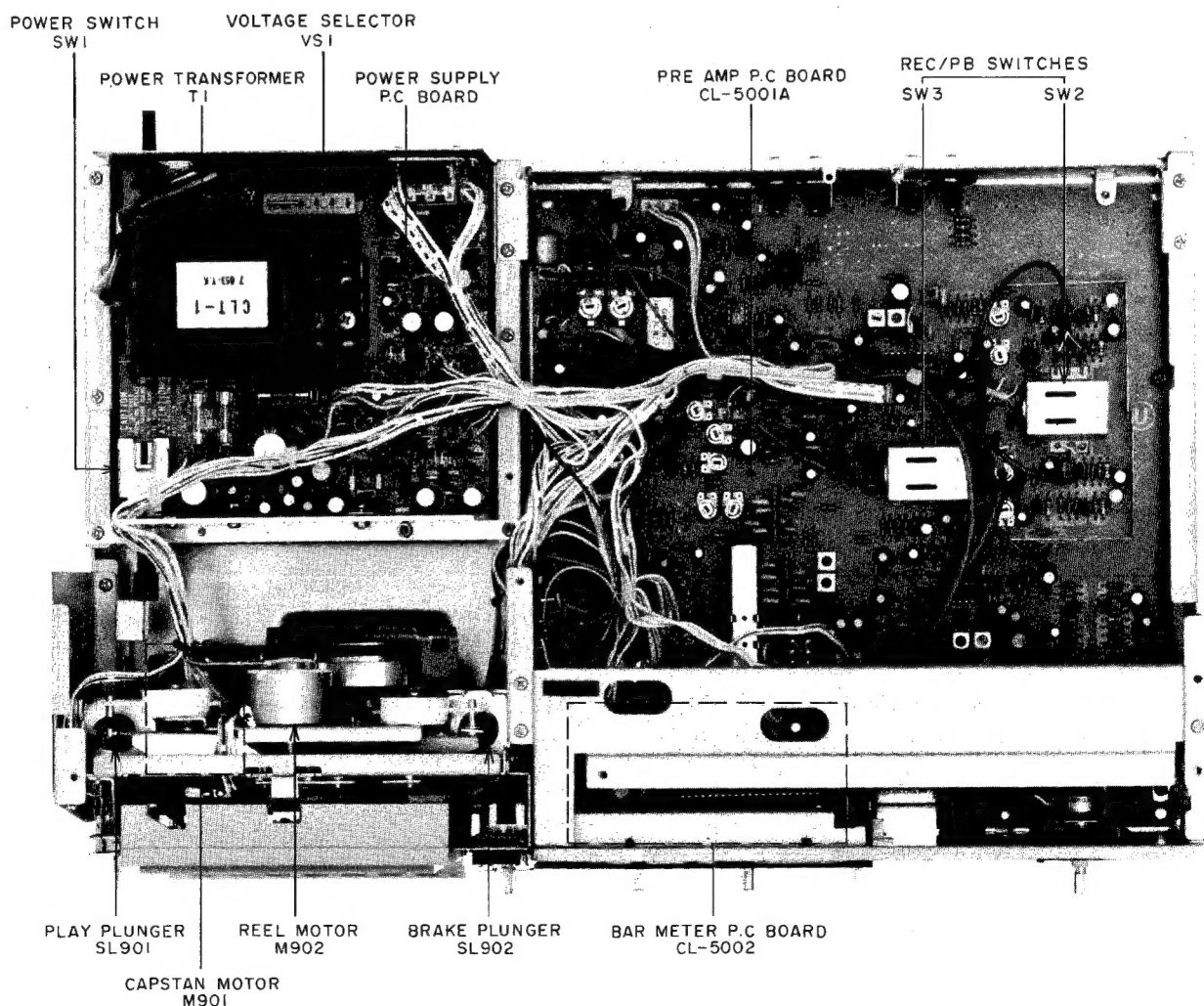


Fig. 3 Top View



## V. VOLTAGE AND CYCLE CONVERSION

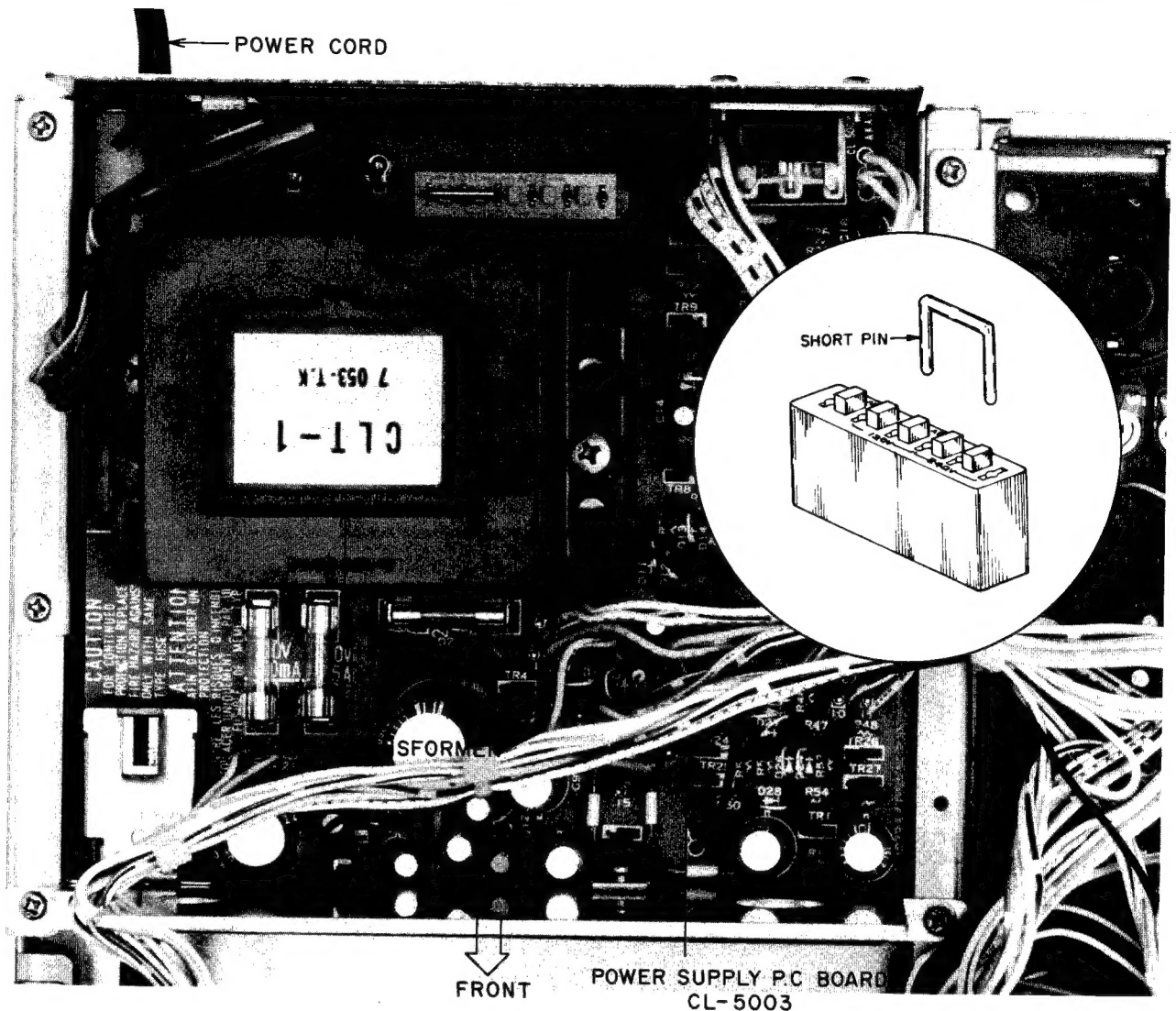


Fig. 4 Voltage Conversion (U/T Model Only)

### 1. VOLTAGE CONVERSION

Models for Canada, Europe, USA, UK, Australia and Japan are not equipped with this facility.

Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V or 240V as required.

If voltage change is necessary, this can be accomplished as follows:

1. Disconnect power cord.
2. Loosen holding screws and remove upper cover.
3. Remove short pin plug from present holes and replace in correct holes.

Follow the markings explicitly.

### 2. CYCLE CONVERSION

With DC motor, cycle conversion is not necessary.

## VI. MECHANICAL ADJUSTMENT

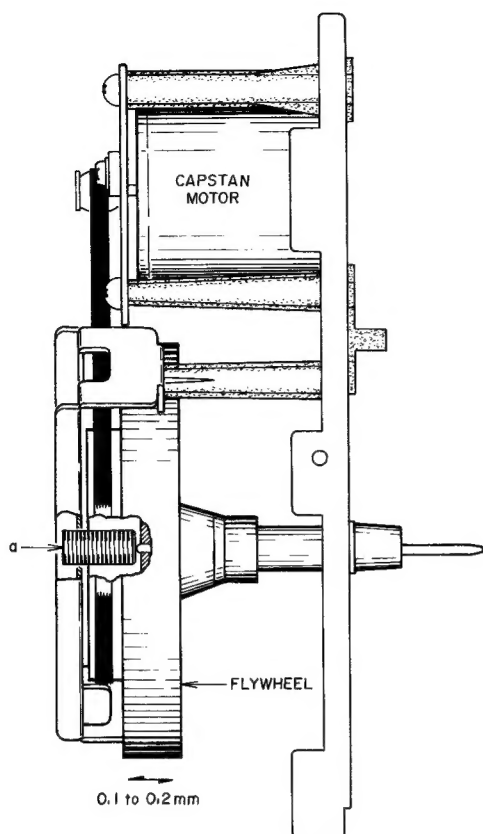


Fig. 5

### 1. FLYWHEEL LOOSE PLAY ADJUSTMENT

(Refer to Fig. 5)

Adjust the screw (a) so that the flywheel moves 0.1–0.2 mm in the direction indicated by the arrow.

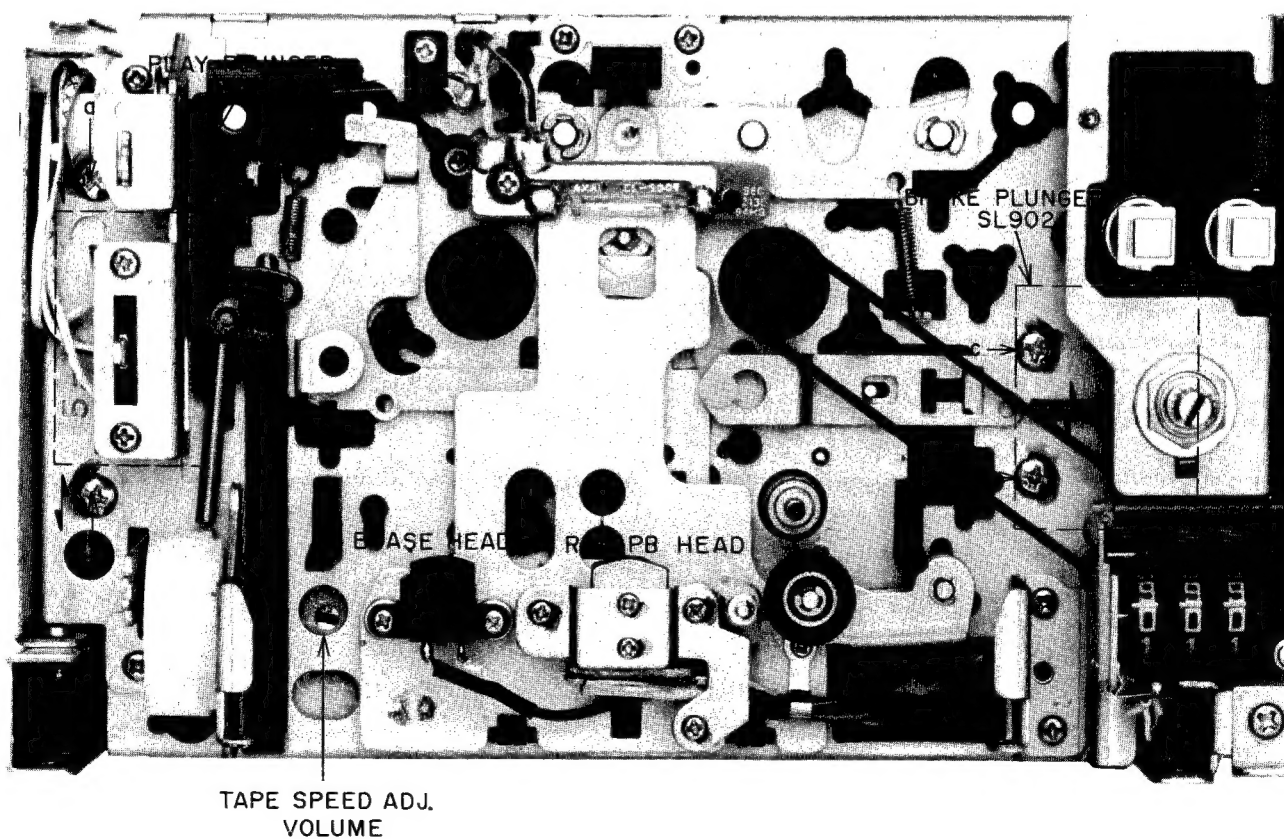


Fig. 6

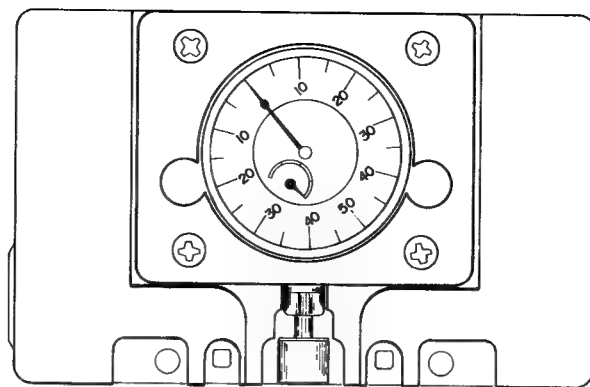


Fig. 7 AKAI Head Projection Gauge

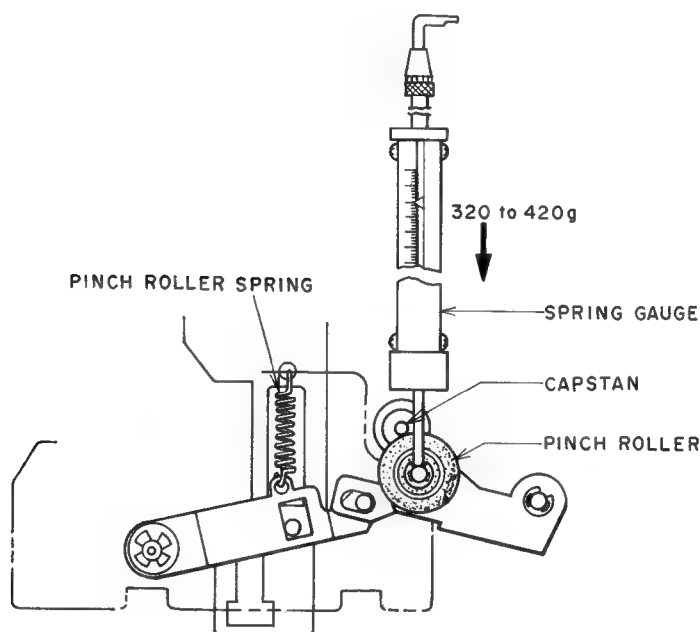


Fig. 8

## 2. PLUNGER POSITIONING

(Refer to Figs. 6, 7)

### 1) Play Plunger Adjustment

Set the Akai Head Projection Gauge. Adjust the screws (a) and (b) so that when PAUSE mode is engaged, the Head Projection Gauge indicates to  $2.5\text{mm} \pm 0.05\text{mm}$ .

### 2) Brake Plunger Adjustment

Set the Akai Head Projection Gauge. Adjust the screws (c) and (d) so that when PLAY mode is engaged, the Head Projection Gauge indicates to  $3.5\text{mm} \pm 0.15\text{mm}$ .

## 3. PINCH ROLLER PRESSURE MEASUREMENT (Refer to Fig. 8)

At playback mode, push the pinch roller with a spring gauge until the pinch roller separates from the capstan by about 1 mm to 2 mm and then gently return. Take a reading of the spring gauge indica-

tion at the moment the pinch roller touches the capstan and begins to rotate

Specified Pinch Roller Pressure 320–420 g

In case specified pressure cannot be attained, replace the pinch roller spring.

## 4. VARIOUS TORQUE MEASUREMENT

Use the Cassette Torque Meter to confirm that the value of each mode is as follows:

Take-up Torque:	35 to 50 g-cm
Back Tension:	2 to 4 g-cm
FF/RWD Torque:	85 to 130 g-cm

## 5. TAPE SPEED ADJUSTMENT

(Refer to Fig. 6)

Playback a 1,000 Hz pre-recorded test tape and adjust the tape speed adjustment volume to obtain a tape speed of  $1,000\text{ Hz} \pm 5\text{ Hz}$ .

## VII. HEAD ADJUSTMENT

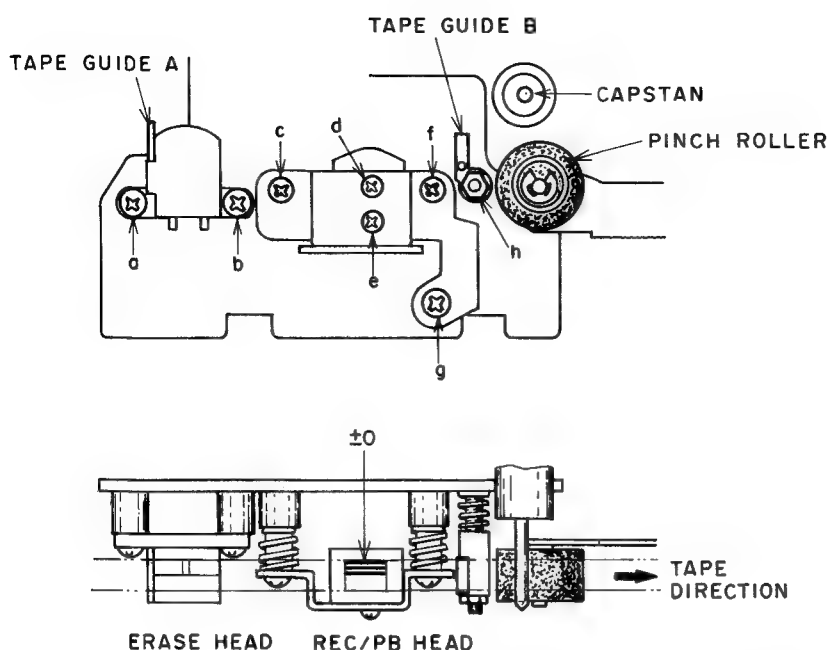


Fig. 9 Head Adjustment

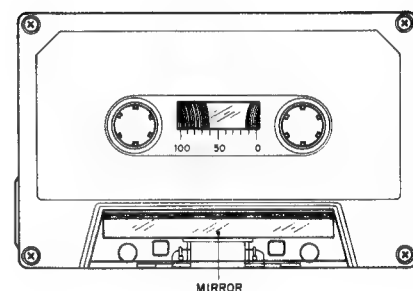


Fig. 10 Mirror Cassette

### 1. TAPE GUIDE HEIGHT ADJUSTMENT

(Refer to Figs. 9, 10)

- 1) When using an ordinary cassette, the tape guides and heads, etc. are not visible. As shown in Fig. 10 use a cassette tape from which part of the cassette case has been cut out and a mirror installed for easy visibility of the head area when making tape guide height adjustment.
- 2) At playback mode, using the tape guide (A) shown in Fig. 9 as standard for height, adjust tape guide (B) height with tape guide height adjustment nut so that the tape runs smoothly and does not catch on the tape guides.

### 2. RECORDING/PLAYBACK HEAD HEIGHT ADJUSTMENT (Refer to Figs. 9, 10)

- 1) Utilize the cassette tape used in Tape Guide Height Adjustment above and playback the leader tape part of cassette tape.
- 2) As shown in Fig. 9 adjust head height with screws (c), (f) and (g) until the upper edge of the tape is the same height as the upper edge of the left channel REC/PB head core.
- 3) After adjustment step 2), playback the Head Height Adjustment tape (4 track, 1,000 Hz) and adjust Head Height Adjustment screws (c), (f) and (g) to put the output from both channels to maximum.

### 3. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT

(Refer to Fig. 9)

- 1) Playback a 10 kHz pre-recorded cassette azimuth alignment test tape and adjust screw (c) shown in Fig. 9 to obtain maximum output on both channels.
- 2) Invert cassette and confirm that the output level does not change from that obtained in Item 3-1) above. If the output level differs, adjust in the same way as in Item 3-1) above until both sides of the test tape display equal output.
- 3) After adjustment, better to check again head height and azimuth alignment.

- NOTES:
1. Be sure to clean the heads prior to head adjustment.
  2. Be careful not to use a magnetized screwdriver or other magnetized tools in the vicinity of the heads.
  3. Be sure to demagnetize the heads with a Head Demagnetizer before and after head adjustment.
  4. When a mirror installed cassette test tape as shown in Fig. 10 is required, it can be ordered from AKAI Electric Co.

## VIII. ELECTRICAL ADJUSTMENT

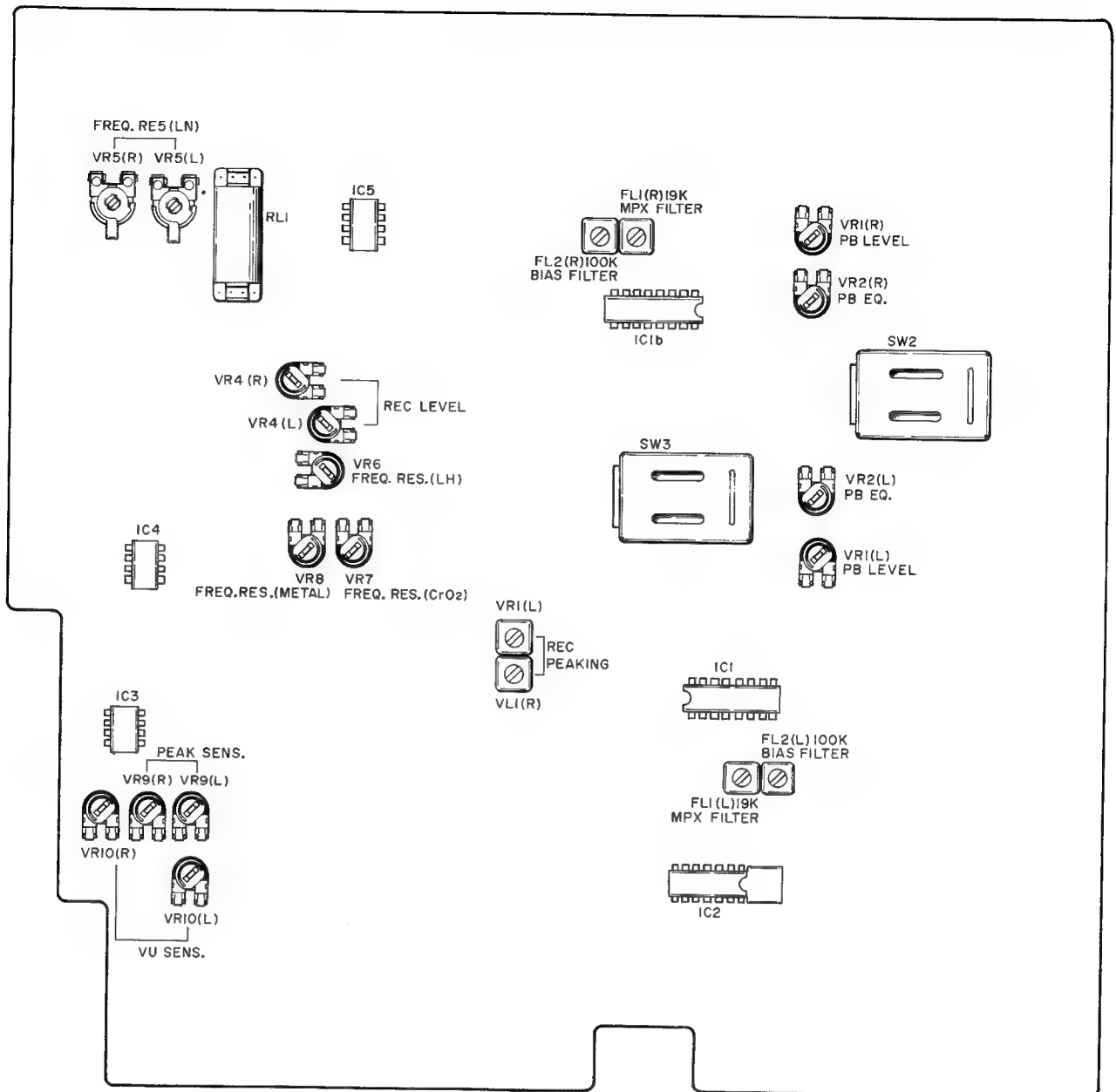


Fig. 11 Adjustment Points Pre Amp P.C Board CL-5001A



Step	Adjustment Item	Test Tape Supply Signal	Mode	Test Point	Adjustment Parts	Result & Remarks
1	PB Level	Test Tape (333 kHz)	PB	Line Out	VR1 (50 k $\Omega$ )	-5.5 dBs $\pm$ 0.5 dB
2	PB EQ.	Test Tape (10 kHz)	PB LN Position	Line Out	VR2 (5 k $\Omega$ )	-19 dB
3	VU Sensitivity	1 kHz from Oscillator	Rec VU Position	Bar Meter	VR10 (20 k $\Omega$ )	Adjust so that the Bar Meter indicates 0 dB when setting the Line Out to -5.5 dB with Rec Volume.
4	PEAK Sensitivity	1 kHz from Oscillator	Rec Peak Position	Bar Meter	VR9 (20 k $\Omega$ )	Adjust so that at the same condition as above the Bar Meter indicates - 7 dB.
5	Rec Peaking	16.7 kHz -25.5 dB from Oscillator	Rec LN Position	Figs. 12, 13 14	VL1 (10 mH)	Maximum Voltage (Note 4)
6	Frequency Response (LN)	LN Blank Tape 1 kHz, 10 kHz -25.5 dBm	REC/PB LN Position	Line Out	VR5 (50 k $\Omega$ )	1 kHz to 10 kHz flat Level
7	Frequency Response (LH)	LH Blank Tape 1 kHz, 10 kHz -25.5 dBm	REC/PB LH Position	Line Out	VR6 (100 k $\Omega$ )	Same as above.
8	Frequency Response (CrO <sub>2</sub> )	CrO <sub>2</sub> Blank Tape 1 kHz, 10 kHz -25.5 dBm	REC/PB CrO <sub>2</sub> Position	Line Out	VR7 (100 k $\Omega$ )	Same as above.
9	Frequency Response (Metal)	Metal Blank Tape 1 kHz, 10 kHz -25.5 dBm	REC/PB Metal Position	Line Out	VR8 (50 k $\Omega$ )	Same as above.
10	REC Level	LN Blank Tape -5.5 dBm	REC/PB LN Position	Line Out	VR4 (30 k $\Omega$ )	-5.5 dBs $\pm$ 0.5 dB
11	Bias Filter	No Signal	REC REC Vol. Maximum Position	Line Out	FL2	Minimum Output
12	MPX Filter	19 kHz from Oscillator	REC Filter ON	Line Out	FL1	Minimum Output

- NOTES: 1. The Output Volume should be set at maximum.  
2. The Input Selector switch should be set at "LINE". (Europe, UK and Australia Models only.)  
3. Please use the following tapes as measuring tapes.  
LN Tape: TDK LN2 C-60  
LH Tape: Maxell UD C-60  
CrO<sub>2</sub> Tape: TDK SA C-60  
Metal Tape: TDK MA-C C-60  
4. Ground the base of TR14, as shown in Fig. 14, to stop the Bias Oscillator from oscillating when conducting REC Peaking Adjustment.

## IX. DC RESISTANCE OF VARIOUS COILS

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Description	Name	DC Resistance
REC/PB Head	PR4-7	650 ohms $\pm$ 10%
Erase Head	HF213151	3.5 ohms
Play and Brake Plunger	1240 PLT	90 ohms $\pm$ 10%



## **X. CLASSIFICATION OF VARIOUS P.C BOARDS**

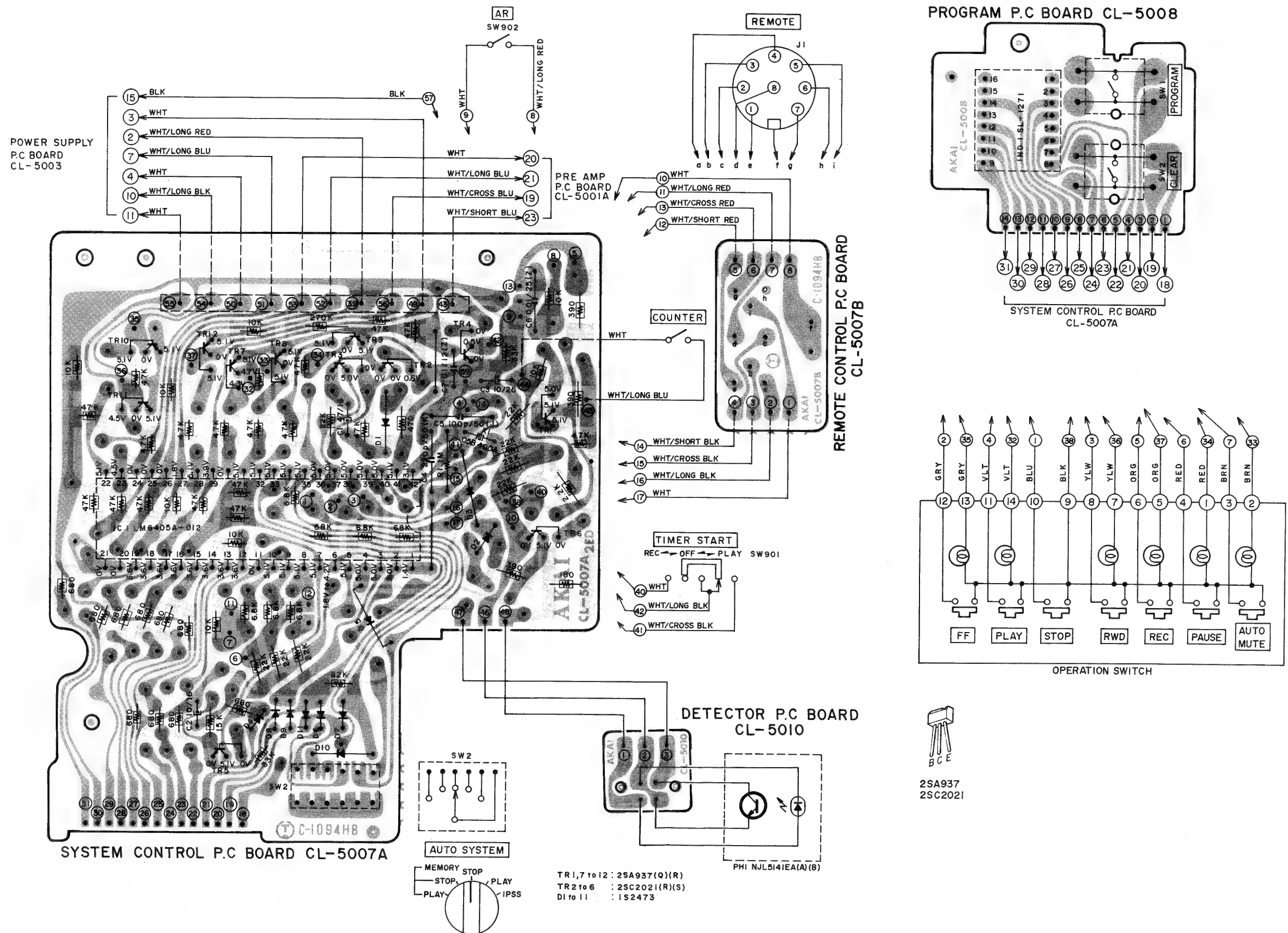
### **1. P.C Board Titles and Identification Numbers**

P.C Board Title	P.C Board Number	Remarks
Pre Amp P.C Board	CL-5001A	
Volume P.C Board	CL-5001B	
LED P.C Board	CL-5001C	
Bar Meter P.C Board	CL-5002	
Power Supply P.C Board	CL-5003	U/T
Power Supply P.C Board	CL-5004	JPN
Power Supply P.C Board	CL-5005	AAL
Power Supply P.C Board	CL-5006	CEE, SAA, UK
Power Supply P.C Board	CL-5025	CSA
System Control P.C Board	CL-5007A	
Remote Control P.C Board	CL-5007B	
Program P.C Board	CL-5008	
Lamp P.C Board	CL-5009	
Detector P.C Board	CL-5010	

1) Pre Amp P.C Board CL-5001A, Volume P.C Board CL-5001B, LED P.C Board CL-5001C and Bar Meter P.C Board CL-5002

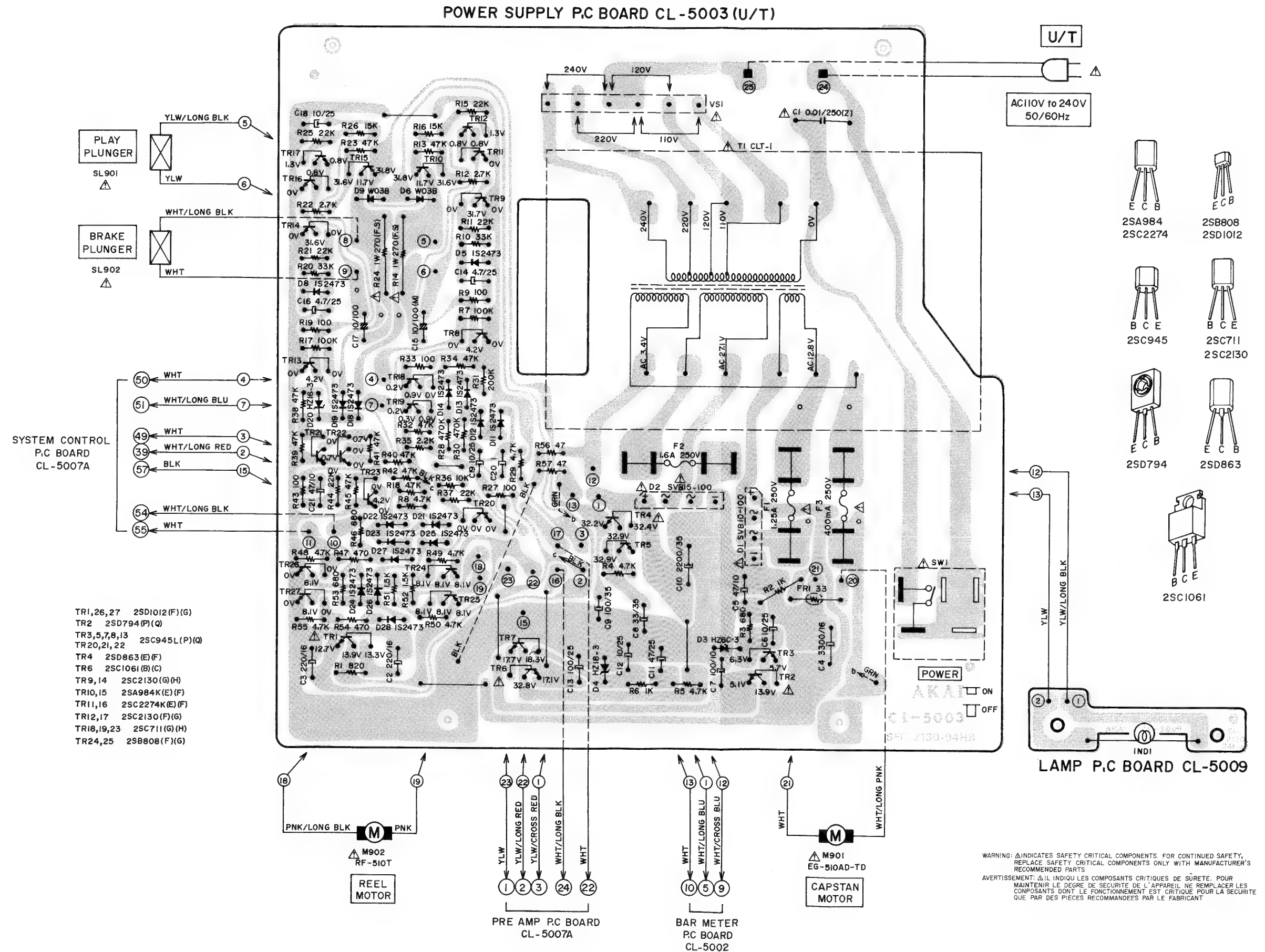


2) System Control P.C Board CL-5007A(2ED), Remote Control P.C Board CL-5007B, Program P.C Board CL-5008 and Detector P.C Board CL-5010

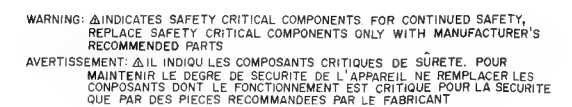




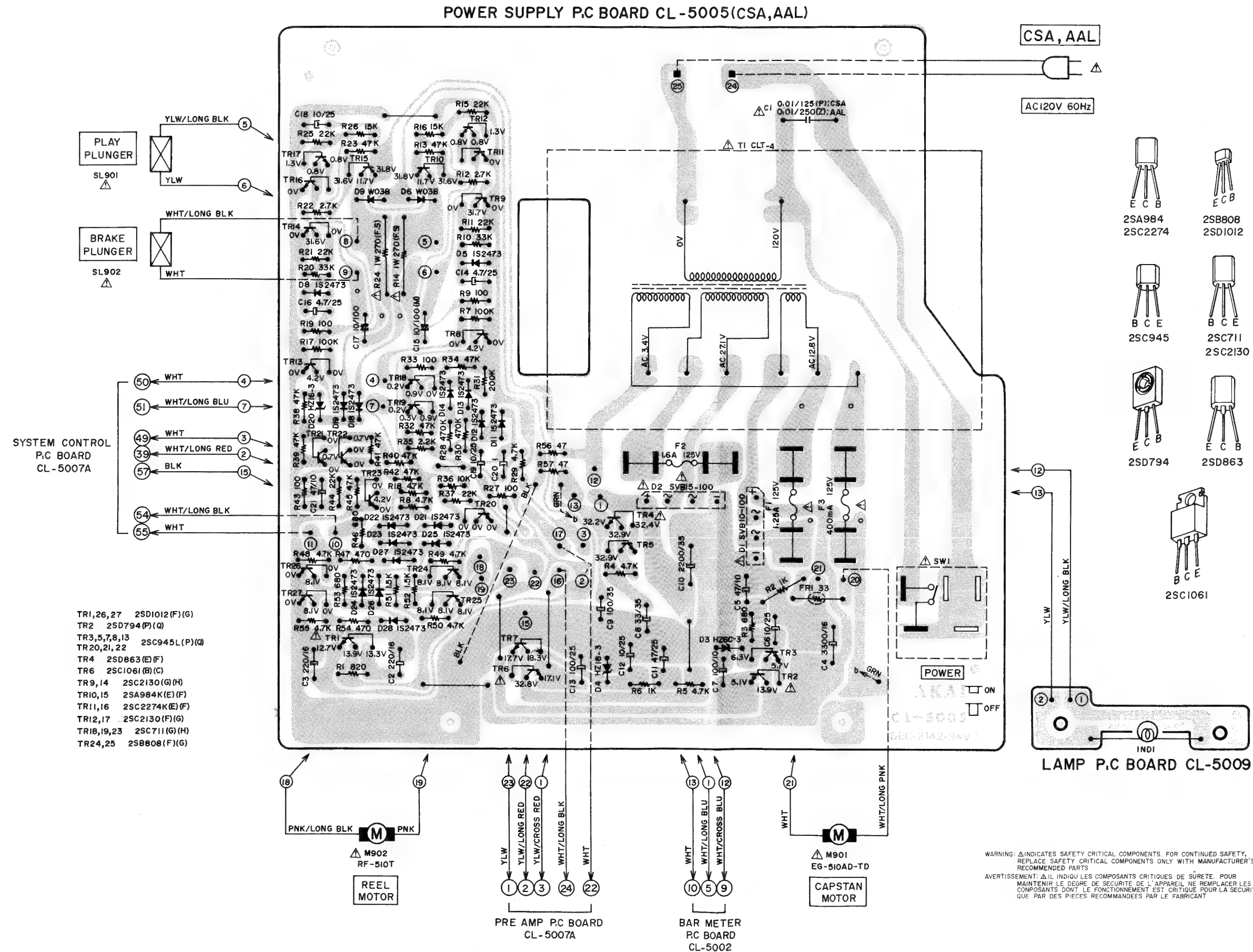
3) Power Supply P.C Board (U/T) CL-5003 and Lamp P.C Board CL-5009



## JPN

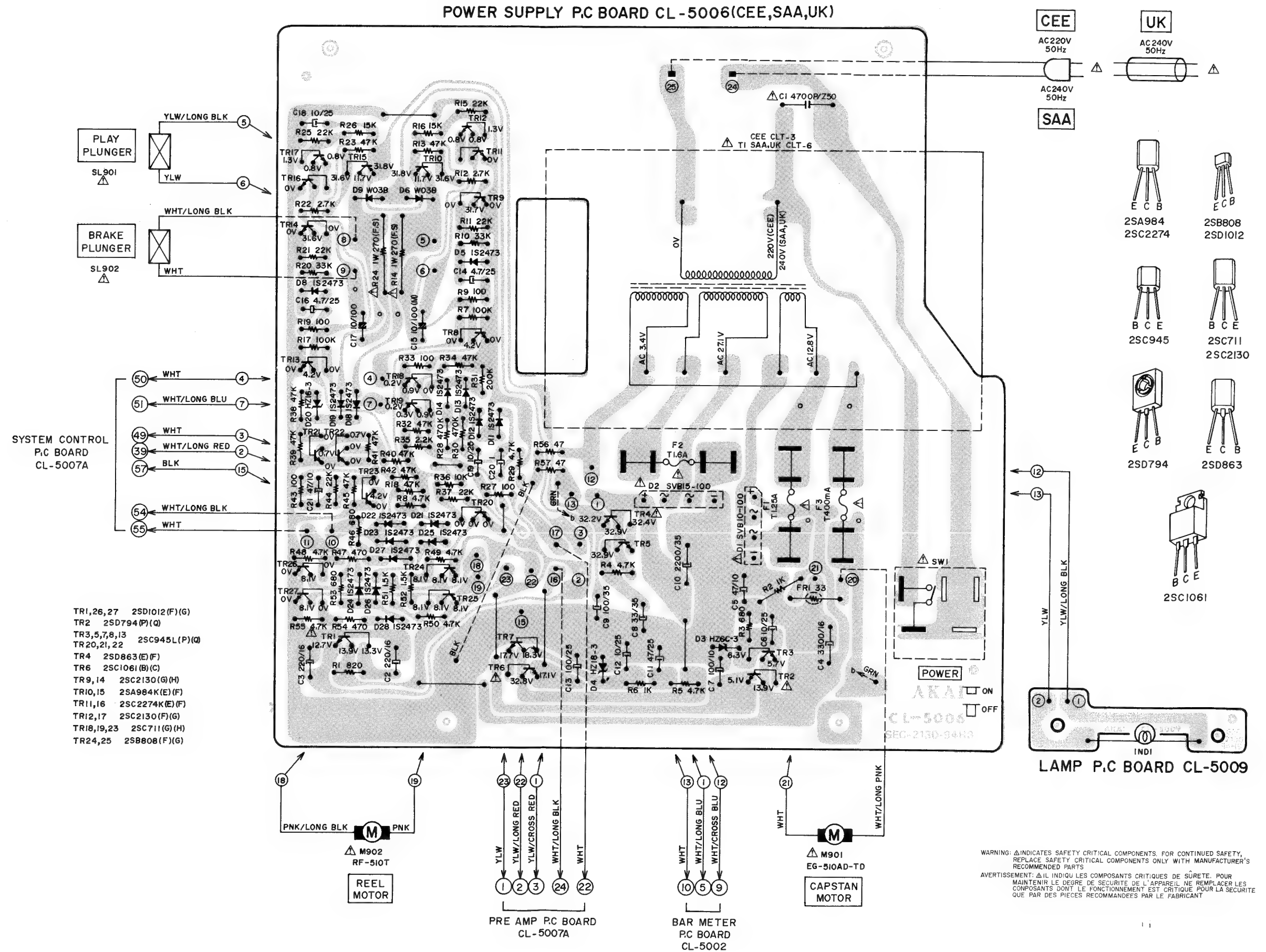


5) Power Supply P.C Board (CSA, AAL) CL-5005 and Lamp P.C Board CL-5009





6) Power Supply P.C Board (CEE, SAA, UK) CL-5006 and Lamp P.C Board CL-5009









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## SECTION 2

# PARTS LIST

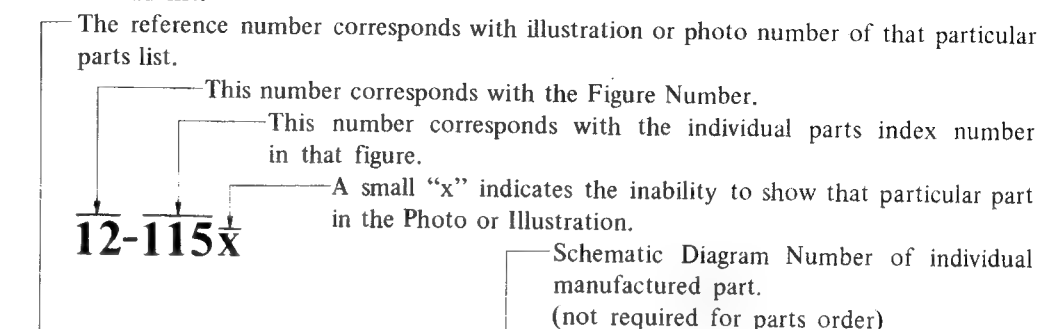
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6. SYSTEM CONTROL P.C BOARD (CL-5007A) BLOCK .....	35
7. BAR METER P.C BOARD (CL-5002) BLOCK .....	35
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Resistor and Capacitor which is not listed in this parts list, please refer to  
COMMON LIST FOR SERVICE PARTS.

## HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read list.



Ref. No.	Parts No.	Description	Schematic No.
<b>FLYWHEEL BLOCK #13</b>			
12-115x	800425	Flywheel Block Assy. Comp.	RDG #13
12-116	244506	Flywheel Only	RD 233
12-117x	244754	Felt, Flywheel	RD 235
12-118	251324	Main Metal Case	RD 236
12-119	253080	Main Metal	RD 237

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of components of the Schematic Diagram or Service Manual.
5. The indications of Resistors and Capacitors in the photos of P.C. Board are being eliminated.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.  
It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

### CAUTION:

1. When placing an order for parts, be sure to list the parts no., model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
3. Because parts number and parts unit supply in the Preliminary Service Manual (Basic Parts List) may be partially changed, please use this parts list for all future reference.

**WARNING:**  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMEMNDED PARTS.

**AVERTISSEMENT:**  $\Delta$  IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

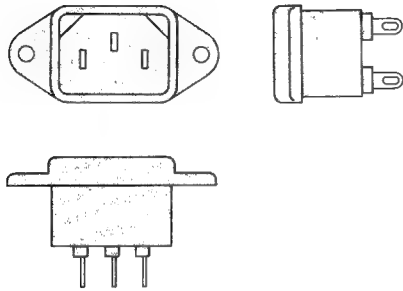
## AC INLET SYSTEM

This model is equipped with an AC INLET SYSTEM. Please refer to the AC INLET SYSTEM CHART below for the specific type. By the AC INLET SYSTEM, AC (mains) cord can be connected to and disconnected from the model because the model is provided with socket exclusively for AC (mains) cord on its main body.

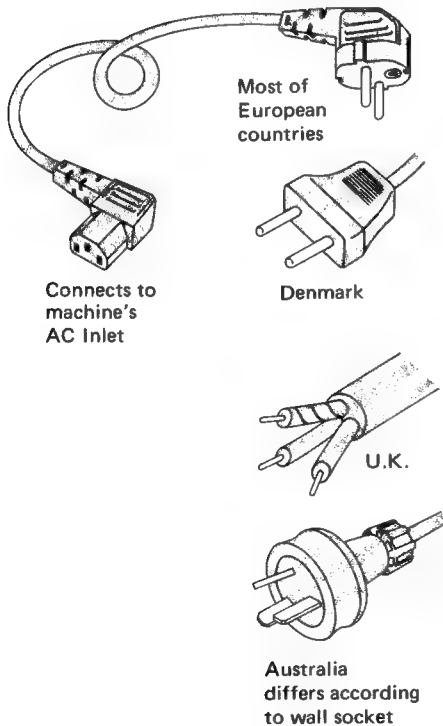
Please note, however, that certain models are not equipped with this system and has a built-in AC (mains) cord as before.

### AC INLET SYSTEM CHART

#### CLASS I

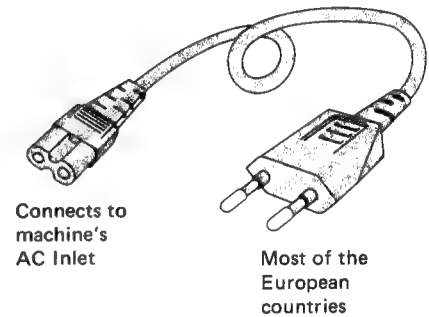
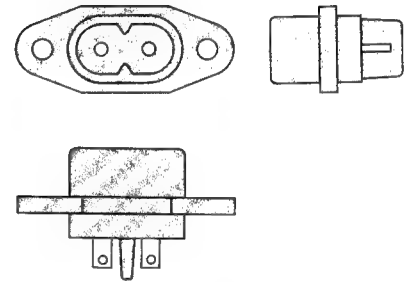


Picture 1  
AC INLET  
to be  
installed  
on machines



#### CLASS II

☐ This mark indicating double insulation will be attached to machine's rear panel



Picture 2  
AC (mains)  
cord

#### Parts List for AC (mains) Cord Set

Standard		Description	Type of AC Inlet	Parts No.
Class I	CEE	Cord Set CEE (3 cores)	3P	EW302993
	UK	Cord Set UK (3 cores)	3P	EW302994
	SAA	Cord Set SAA (3 cores)	3P	EW302996
	U/T	Cord Set U/T (3 cores)	3P	EW302646
Class II	CEE	Cord Set CEE (2 cores)	2P	EW638144
	UK	Cord Set UK (2 cores)	2P	EW302995
	SAA	Cord Set SAA (2 cores)	2P	EW302991
	U/T	Cord Set U/T (2 cores)	2P	EW302899

## 1. RECOMMENDED SPARE PARTS LEST

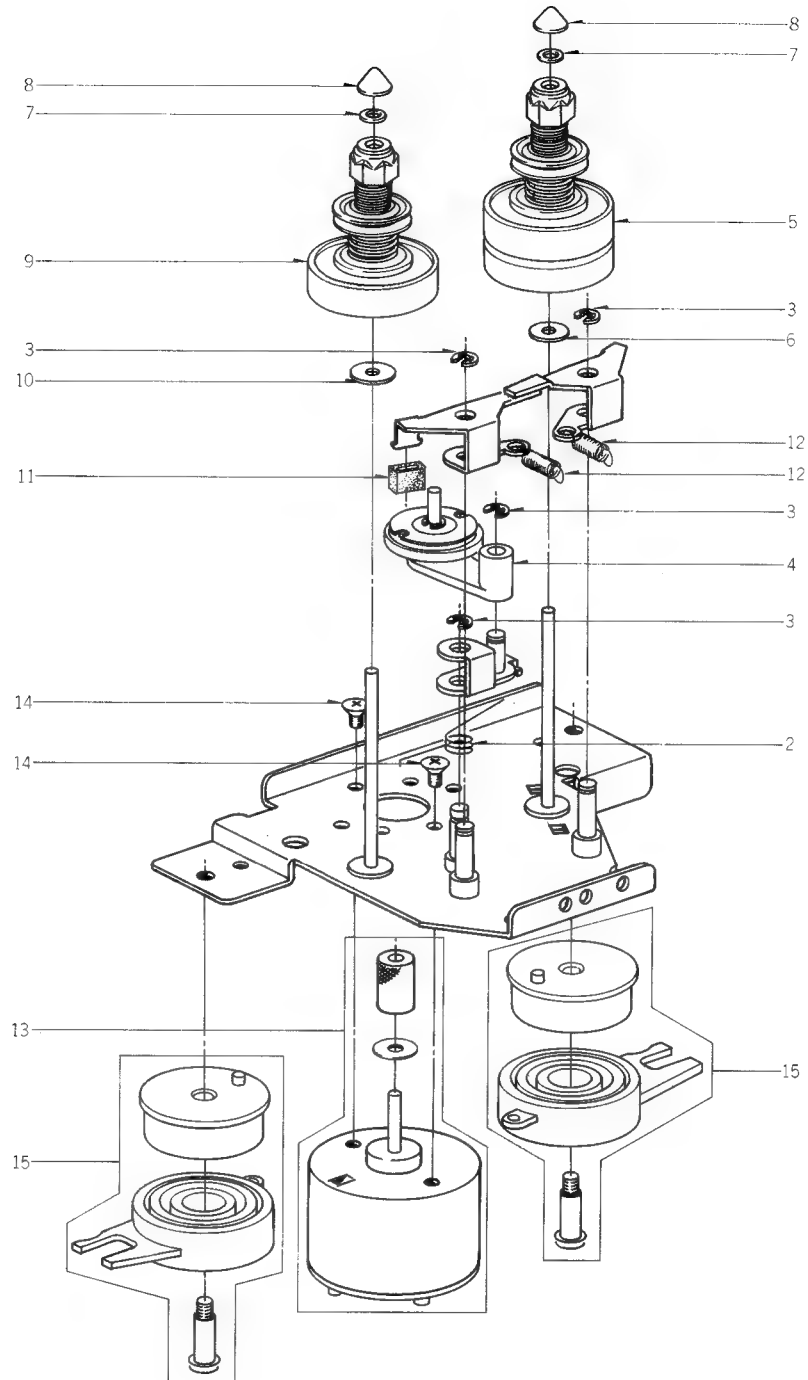
Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

Parts No.	Description	Notes
BA329383	Power Supply PC (A) BLK GX-F35 (U/T)	
BA329384	Power Supply PC (B) BLK GX-F35 (JPN)	
BA329390	Pre Amp PC BLK GX-F35 (U/T)	
BA329359	Syscon PC BLK GX-F35	
BH329370	Head BLK GX-F35	
BK328417	SW Operation GX-F35 7P L	
BK328528	SW Operation GX-F35-BL 7P L	
BL328427	Take-Up Idler ASSY	
BL328426	Wind Idler ASSY	
BM329353	Main Motor BLK W/Pulley GX-F35	
BM329350	Reel Motor W/Pulley GX-F35	
BR328517	Reel Table Part GX-F35	
BR328425	Supply Reel Table ASSY	
BR328424	Take-Up Reel Table ASSY	
BT328401	△ Trans Power CLT-1	U/T
BT328402	△ Trans Power CLT-2	JPN
BZ329366	Damper (A) ASSY GX-F35	
BZ329351	Damper (B) ASSY GX-F35	
ED308953	D Germa H 1K34A-LH SNP	
ED562397	D Germa H 1S188FM1	
ED318408	D LED GL-9NG2 GRN	
ED317594	D Silicon H 1S2473HL F12	
ED316143	D Silicon H 1S2473HS F10	
ED308945	D Silicon SVB10-100 100/0.1A	
ED309357	D Silicon SVB15-100 100/1.5A	
ED200468	D Silicon V DS448 VB3	
ED560913	D Silicon V 1S2473VE	
ED306109	D Silicon W03B 100/1.0A	
ED624903	D Silicon 1S2473	
ED328486	D Zener H HZ15 3	
ED313846	D Zener H HZ16 3	
ED329449	D Zener H HZ18 3	
ED329058	D Zener H HZ5 C1	
ED319167	D Zener H HZ6 C3	
ED201581	D Zener H HZ7 B1	
ED321180	D Zener H HZ9 B2	
ED200969	D Zener H RD3.0E B2	
ED200967	D Zener H RD5.6E B2	
ED328482	D Zener H 05Z10 L	
ED328481	D Zener H 05Z20 L	

Parts No.	Description	Notes
ED328422	Ind LE SL-1271 Character	
EF306949	△ Fuse TSC A Type 250V 1.25A	
EF311839	△ Fuse TSC A Type 250V 1.60A	
EF309389	△ Fuse TSC A 250V 0.40A	
EI328411	IC LA3161	
EI306141	IC LA4170	
EI328409	IC LC7555	
EI328407	IC LM6405A-012	
EI605013	IC NE545B	
EI213390	IC NJM4558D	
EI329411	Photo Sensor NJL514E-B (A) (B)	
EJ324276	DIN J TCS4680-01-111 P8P	
EL200096	PL Lead 3.5V 100MA	
EM315859	IND FL FIP48CW16YS Graph	
EO328485	Coil OSC 1 2325-067 100.0KC	
EO315758	Coil TUN1 100S-431 100.00KC	
EO321336	Coil VARI 1 FE002 10.00MH	
EO328492	Coil Fix 1 RC875-152J 1.50MHJ	
EP328419	Plunger 1240PLT (TDS-12SB-104)	
EP328420	Plunger 1240PLT (TDS-12SB-105)	
EP328529	Relay LAB2NS DC12V	
ER328520	△ R Fuse ERD2FC 1/4W 1000G	
ER200972	△ R Fuse ERD2FC 1/4W 330J	
ER325381	△ R Fuse FR25SJ 1/4W 2R2J	
ER201803	△ R Fuse FR25SJ 1/4W 680J	
ER328490	Filter Dolby D07-001K 19KC	
ER328491	Filter Dolby D07-003K 100KC	
ES315159	△ SW Push SDG1P 01-1 J	JPN
ES310839	△ SW Push SDG1P-E 01-1 E	U/T
ES328430	SW Leaf BSW-101B 01-1NO	
ES321266	SW Rotary SRZ-W04S 1-10-04S	
ES321274	SW Lever 63349 2-06-03S	
ES300099	SW Push SUF12 2-06-02S	
ES328412	SW Rotary SBU1025N10 2-02-05N	
ES328416	SW Slide SSB02385 2-02-03S	
ES283072	SW Slide SSC22LP 2-02-02N	
ES328415	SW Solenoid SWE018401 18V 04-2S	
ES328530	SW Solenoid SWE018404 18V 04-2N	
ES328414	SW Tact KHC10901	
ET303697	TR FET 2SK117(GR)	

Parts No.	Description	Notes
ET201801	TR 2SA830	
ET328436	TR 2SA937 Q.R	
ET324134	TR 2SA984K (E) (F)	
ET328438	TR 2SB808-V F, G	
ET375603	TR 2SC1061 (B) (C)	
ET603257	TR 2SC1312S (G) (H)	
ET328435	TR 2SC2021 R, S	
ET311868	TR 2SC2130 (F) (G)	
ET308937	TR 2SC2130 (G) (H)	
ET309353	TR 2SC2274 (E) (F)	
ET563905	TR 2SC711 (G) (H)	
ET638504	TR 2SC945L PA	
ET639437	TR 2SC945L QA, PA	
ET328437	TR 2SD1012-V F, G	
ET307349	TR 2SD794 (P) (Q)	
ET328440	TR 2SD863-V8 E, F	
ET201580	TR 2SD894	
EV300154	R S-Fix H VG103TL2 T3P 0.50W 503	
EV322415	R S-Fix H D8 3P 104	
EV315753	RS-Fix H D8 3P203	
EV315540	RS-Fix H D8 3P502	
EV315541	RS-Fix H D8 3P503	
EV329416	VR Rotary 16P11 X0R 15A503 15A503	
EV329417	VR Rotary 16P20X1Y B103	
EW306428	△ AC Cord 2 Cores KP-205A, VFF UCJ	U/T
EW306427	△ AC Cord 2 Cores KP-211, VFF J	JPN
EZ328406	OSC CE CSB-400A 0.000400MC	
HE321585	Head E HF213151 C	
HP319079	Head REC/PB PR4-7	
MB328324	Counter Belt	
MB328323	Flywheel Belt	
MC328428	Counter SMP393-10	
MC328429	Counter (BL) SMP393-09	
MI328514	Flywheel Part GX-F35	
MP319580	Pinch Roller Part GX-F90	
MV328322	Main Case	
MZ283140	△ Socket Selector X-17238 6P	U/T

## 2. REEL TABLE BLOCK

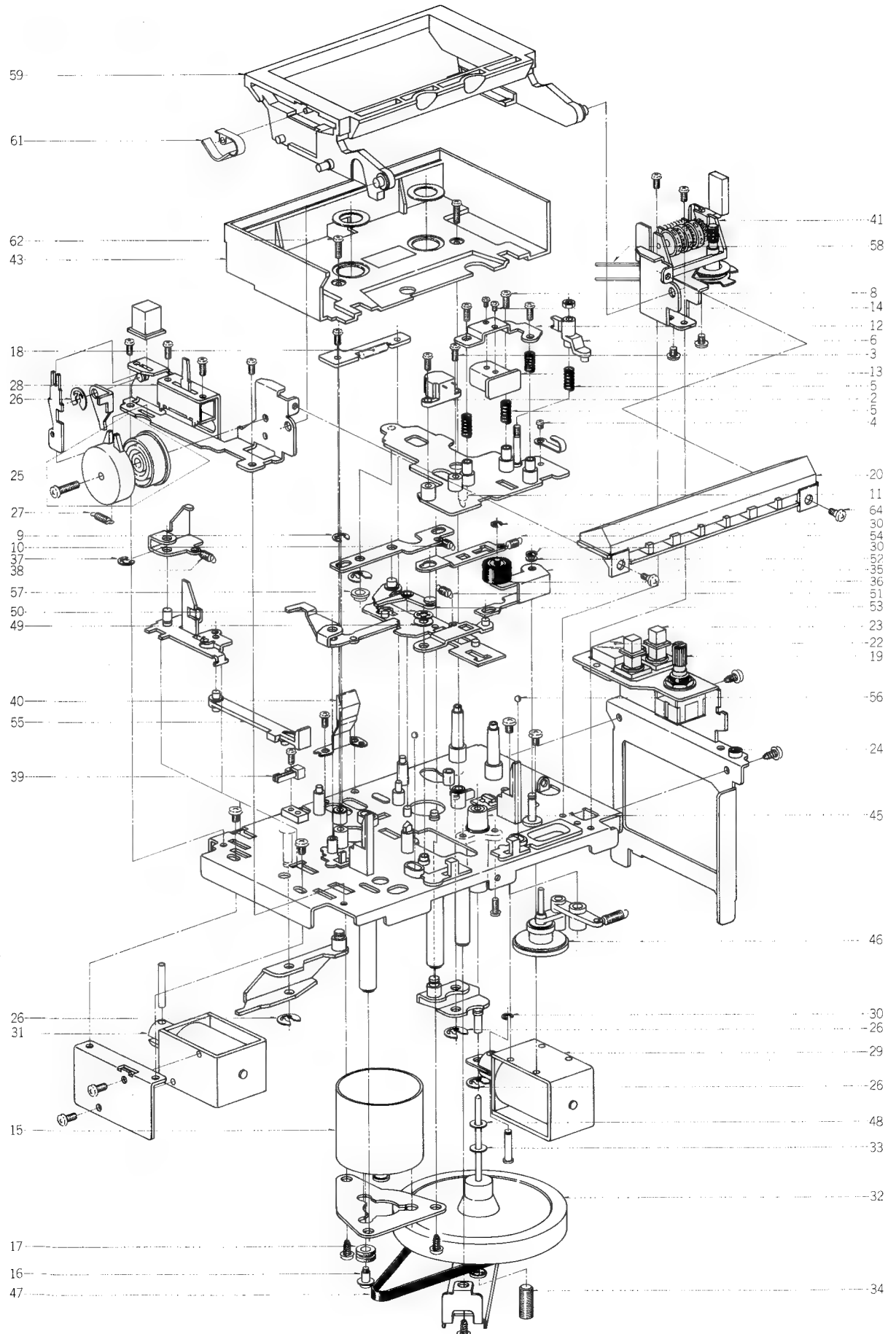


### REEL TABLE BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
2-1X	BR328517	Reel Table Part GX-F35	CL-2001	2-10	ZW201610	PW19.8×080×025PSL	CN-1020
2-2	ZG328361	Idler Spring	CL-2008	2-11	MB282104	Brake Rubber	
2-3	ZW270088	Ring E 190SUP CMT	6-1-9	2-12	ZG312945	SP T1-3.2/0.29-14.0 T1-061	
2-4	BL328426	Wind Idler ASSY	9-3-70	2-13	BM329350	Reel Motor BLK	
2-5	BR328424	Take-Up Reel Table ASSY	9-3-68	2-14	ZS430413	CTS26×04STL CMT	
2-6	ZW536466	PW21×070×050NYL					
2-7	ZW305546	PW21×040×025PSL					
2-8	MT305793	Reel Cap	CF-2039	2-15	BZ329351	Damper (B) ASSY GX-F35	CL-1043
2-9	BR328425	Supply Reel Table ASSY	9-3-69				



### 3. MECHA ASSEMBLY BLOCK



## MECHA ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
<b>HEAD BLOCK</b>				<b>LID HOUSING ASSY</b>			
3-1X	BH329370	Head BLD GX-F35	37-2-33	3-43	BZ329374	LID Housing ASSY GX-F35	
3-2	HE321585	Head E HF213151 C		3-44X	BZ329375	LID Housing ASSY GX-F35-BL	
3-3	ZS590804	PAN23×06STL CMT		<b>MECHA ASSEMBLY BLOCK</b>			
3-4	ZS303936	PAN20×02STL CMT		3-45	MV328322	Main Case	CL-1014
3-5	ZG328305	Angle Spring	CL-0007	3-46	BL328427	Take-Up Idler Assy	9-3-71
3-6	HZ328307	Tape Guide	CL-0009	3-47	MB328323	Flywheel Belt	CL-1016
3-7	ZW591265	N23BRS NI3 3		3-48	ZW694798	PW31×070×020TFL	
3-8	ZS590804	PAN23×06STL CMT		3-49	ZW259492	PW31×080×030PBR	
3-9	ZW270101	Ring E300SUP CMT312981	6-1-9	3-50	ZW329422	Ring CS0300	6-1-18
3-10	ZG312946	SP T1-3.2/0.29-16.0 T1-062		3-51	ZG328352	Pinch Roller Spring	CL-1041
3-11	ZG312997	SP T1-4.0/0.4-16.0		3-52	ZW329448	PW26×045×013PSL	
3-12	HZ328036	Head Fixation Plate	CL-0008	3-53	ML328337	Coupling Lever	CL-1028
3-13	HP319079	Head REC/PB PR4-7		3-54	ZG324329	SP T2-3.2/0.29-11.2 T2-059	
3-14	ZS477876	PAN20×03STL CMT		3-55	TC328344	Eject Joint	CL-1034
<b>MAIN MOTOR BLOCK</b>				3-56	MV368886	Ball 300STL	
3-15	BM329353	Main Motor BLK W/Pulley GX-F35		3-57	TC328348	Guide Collar	CL-1037
3-16	ZS321338	Motor Screw	7-1-75	3-58	MB328324	Counter Belt	CL-1017
3-17	MB282778	Rubber Bush	CN-7003	3-59	TC328350	Cassette Holder	CL-1040
<b>LAMP P.C BOARD BLOCK</b>				3-60X	TC328351	Cassette Holder (BL)	CL-1040
3-18	EL200096	PL Lead 3.5V 100MA	E28-01-083	3-61	ZG321487	Mold Spring	CE-6011
<b>MECHA SIDE PLATE (R) BLOCK</b>				3-62	ZS329445	PLX PAN26X08ST NI3	
3-19	ES328412	SW Rotary SBU1025N10 2-02-05N	25-6-202	3-63X	ZS329443	PLX PAN26X08ST BNI (BL)	
3-20	BK328417	SW Operation GX-F35 7P L	25-5-393	3-64	ZS328347	OP Fixation Screw	CL-1036
3-21X	BK328528	SW Operation GX-F35-BL 7P L	25-5-406				
<b>PROGRAM P.C BOARD BLOCK</b>							
3-22	ED328422	IND LE SL-1271 Character	59-2-6				
3-23	ES328414	SW Tact KHC10901	25-9-17				
<b>DETECTION P.C BOARD BLOCK</b>							
3-24	EI329411	Photo Sensor NJL514E-B (A)(B)	45-18-3				
<b>SW BRACKET BLOCK</b>							
3-25	BZ329366	Damper (A) ASSY GX-F35	CL-1042				
3-26	ZW290283	Ring U285SUP CMT	6-1-1				
3-27	ZG329433	Eject Spring	CL-1045				
<b>SLIDE SW BLOCK</b>							
3-28	ES328416	SW Slide SSB02385 2-02-03S	25-3-186				
<b>R PLUNGER BLOCK</b>							
3-29	EP328420	Plunger 1240PLT (TDS-12SB-105)	44-1-138				
3-30	ZW270088	Ring E 190SUP CMT	6-1-9				
<b>L PLUNGER BLOCK</b>							
3-31	EP328419	Plunger 1240PLT(TDS-12SB-104)	44-1-137				
<b>FLYWHEEL ASSY</b>							
3-32	MI328514	Flywheel Part GX-F35	CL-1015				
3-33	ZW309295	Thrust Washer	CY-1037				
3-34	ZS302318	Hold Screw	CI-1258				
<b>PINCH ROLLER ASSY</b>							
3-35	ML328513	Pinch Roller Arm Part GX-F35	CL-1029				
3-36	MP319580	Pinch Roller Part GX-F90	CU-1056				
<b>EJECT ASSY</b>							
3-37	ZW270101	Ring E300SUP CMT312981	6-1-9				
3-38	ZG312943	SP T1-3.2/0.29-11.2 T1-059					
<b>LEAF SW ASSY</b>							
3-39	ES328430	SW Leaf BSW-101B 01-1 NO	25-10-45				
<b>CASSETTE HOLD PLATE ASSY</b>							
3-40	TC329369	Cassette Hold Plate ASSY GX-F35					
<b>COUNTER ASSY</b>							
3-41	MC328428	Counter SMP393-10	9-1-91				
3-42X	MC328429	Counter (BL) SMP393-09	9-1-92				

When ordering parts, please quote Parts Number, Description and Model Number.

#### 4. PRE AMP P.C BOARD (CL-5001A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.	Symbol No.	Parts No.	Description	Schematic No.
4-1	BA329390	PRE Amp PC BLK GX-F35 (U/T)		4-C12	EC306986	C STY V F05 500 221K 50DC	24-11-14
4-IC1	EI605013	IC NE545B	45-8-117	4-C16	EC308990	C STY V F05 500 471K 50DC	24-11-14
4-IC2	EI306141	IC LA4170	45-8-305	4-C28	EC313826	C SA V F05 R10K 25.0DC	24-19-3
4-IC3 to 5	EI213390	IC NJM4558D	45-8-191	4-C29	EC313825	C SA V F05 R33K 25.0DC	24-19-3
4-IC6	EI328411	IC LA3161	45-8-570	4-C34	EC200983	C STY V F05 500 101K 50DC	24-11-14
4-TR1 to 4	ET603257	TR 2SC1312S (G) (H)	45-1-182	4-C60	EC321066	C SA V F05 R15K 25.0DC	24-19-3
4-TR5	ET303697	TR FET 2SK117(GR)	45-12-15	4-C63	EC306438	C STY V F05 500 101J 50DC	24-11-14
4-TR6	ET639437	TR 2SC945L (QA) (PA)	45-1-85	4-C64	EC325380	C PP V F10 PFH 332J 630DC	24-22-9
4-TR7	ET307349	TR 2SD794 (P) (Q)	45-1-334	4-C74	EC316569	C SA V F05 R22K 25.0DC	24-19-3
4-TR9 to 11	ET639437	TR 2SC945L (QA) (PA)	45-1-85	4-C82	EC316569	C SA V F05 R22K 25.0DC	24-19-3
4-TR12	ET201801	TR 2SA830	E45-01-078	4-C83	EC321074	C STY V F05 CQF09 681K 50DC	24-11-17
4-TR13	ET307349	TR 2SD794 (P) (Q)	45-1-334	4-C100	EC305679	C STY V F05 500 821K 50DC	24-11-14
4-TR14, 15	ET639437	TR 2SC945L (QA) (PA)	45-1-85	4-C103	EC328856	C STY V F05 CQF09 331K 50DC	24-11-17
4-TR16, 17	ET638504	TR 2SC945L (PA)	45-1-85				
4-TR18	ET639437	TR 2SC945L (QA) (PA)	45-1-85	4-2	ZW263946	RV NYL40 x050	2-7-57
4-TR19	ET307349	TR 2SD794 (P) (Q)	45-1-334				
4-TR20	ET639437	TR 2SC945L (QA) (PA)	45-1-85				
4-TR21	ET307349	TR 2SD794 (P) (Q)	45-1-334				
4-TR22, 23	ET639437	TR 2SC945L (QA) (PA)	45-1-85				
4-TR24	ET201580	TR 2SD894	E45-04-078				
4-D1	ED308953	D Germa H 1K34A-LH SNP	45-3-46				
4-D2	ED624903	D Silicon 1S2473	45-3-28				
4-D3,4	ED562397	D Germa H 1S188FM1	45-3-25				
4-D5	ED200967	D Zener H RD5.6E B2	45-6-72				
4-D6	ED200969	D Zener H RD3.0E B2	45-6-72				
4-D7	ED562397	D Germa H 1S188FM1	45-3-25				
4-D8, 9	ED624903	D Silicon 1S2473	45-3-28				
4-D10	ED328482	D Zener H 05Z10 L	45-6-76				
4-D11, 12	ED624903	D Silicon 1S2473	45-3-28				
4-D13	ED328486	D Zener H HZ15 3	45-6-80				
4-D14	ED624903	D Silicon 1S2473	45-3-28				
4-D15	ED562397	D Germa H 1S188FM1	45-3-25				
4-D16 to 18	ED560913	D Silicon V 1S2473VE	45-3-23				
4-D19	ED306109	D Silicon W03B 100/1.0A	45-2-78				
4-D20	ED321180	D Zener H HZ9 B2	45-6-80				
4-D21	ED562397	D Germa H 1S188FM1	45-3-25				
4-D22	ED200468	D Silicon V DS448 VB3	45-3-73				
4-D23	ED560913	D Silicon V 1S2473VE	45-3-23				
4-D24	ED201581	D Zener H HZ7 B1	45-6-80				
4-SW1	ES283072	SW Slide SSC22LP 2-02-02N	25-3-131				
4-SW2	ES328530	SW Solenoid SWE018404 18V 04-2N	25-9-25				
4-SW3	ES328415	SW Solenoid SWE018401 18V 04-2S	25-9-18				
4-SW4	ES321266	SW Rotary SRZ-W04S 1-10-04S	25-6-183				
4-SW6	ES300099	SW Push SUF12 2-06-02S	E25-27-110				
4-SW7	ES321274	SW Lever 63349 2-06-03S	25-12-65				
4-SW8	EP328529	Relay LAB2NS DC12V	47-2-30				
4-VL1	EO321336	Coil VARI 1 FE002 10.00MH	23-1-333				
4-VR1	EV315541	VR S-Fix H D8 3P 503	36-10-282				
4-VR2	EV315540	R S-Fix H D8 3P 502	36-10-282				
4-VR3,4	EV329417	VR Rotary 16P20x1Y B103	36-22-66				
4-VR5	EV300154	R S-Fix H VG103TL2 T3P 0.50W 503	E36-04-016				
4-VR6,7	EV322415	R S-Fix H D8 3P 104	36-10-282				
4-VR8	EV315541	R S-Fix H D8 3P 503	36-10-282				
4-VR9, 10	EV315753	R S-Fix H D8 3P 203	36-10-282				
4-L1	EO328492	Coil Fix1 RC875-152J 1.50MH J	23-1-335				
4-T1	EO328485	Coil OSC 1 2325-067 100.0KC	23-1-426				
4-FL1	ER328490	Filter Dolby D07-001K 19KC	23-1-425				
4-FL2	ER328491	Filter Dolby D07-003K 100KC	23-1-425				
4-FL3	EO315758	Coil TUN1 100S-431 100.0KC	23-1-331				
4-J1	EJ321328	Phone J HLJ0345-010 2x3P	31-2-110				
4-J2	EJ316156	Phone J 3P HLJ0315-020 6.3	31-2-106				
4-J3	EJ308986	Pin J. 1784P1782 P 4P (U)	31-5-145				
4-J3	EJ308985	Jack Plate DIN, Pin Jack 4P(J)	31-5-144				
4-FR1	ER328520	△ R Fuse ERD2FC 1/4W 1000G	35-14-31				
4-FR2	ER201803	△ R Fuse FR25SJ 1/4W 680J	35-14-23				
4-FR3	ER325381	△ R Fuse FR25SJ 1/4W 2R2J	35-14-23				
4-R66	ER328433	COMP R 01-0076	35-11-40				
4-R67	ER328431	COMP R 01-0073	35-11-39				

## 5. POWER SUPPLY (A) P.C BOARD (CL-5003/5004) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
5-1	BA329383	Power Supply PC (A) BLK GX-F35 (U/T)	
5-2	BA329384	Power Supply PC (B) BLK GX-F35 (JPN)	
5-TR1	ET328437	TR 2SD1012-V (F) (G)	45-1-396
5-TR2	ET307349	TR 2SD794 (P) (Q)	45-1-334
5-TR3	ET639437	TR 2SC945L (QA) (PA)	45-1-85
5-TR4	ET328440	TR 2SD863-V8 (E) (F)	45-1-398
5-TR5	ET639437	TR 2SC945L (QA) (PA)	45-1-85
5-TR6	ET375603	TR 2SC1061 (B) (C)	45-1-96
5-TR7,8	ET639437	TR 2SC945L (QA) (PA)	45-1-85
5-TR9	ET308937	TR 2SC2130 (G) (H)	45-1-317
5-TR10	ET324134	TR 2SA984K (E) (F)	45-1-378
5-TR11	ET309353	TR 2SC22274 (E) (F)	45-1-335
5-TR12	ET311868	TR 2SC2130 (F) (G)	45-1-317
5-TR13	ET639437	TR 2SC945L (QA) (PA)	45-1-85
5-TR14	ET308937	TR 2SC2130 (G) (H)	45-1-317
5-TR15	ET324134	TR 2SA984K (E) (F)	45-1-378
5-TR16	ET324134	TR 2SC2274 (E) (F)	45-1-335
5-TR17	ET311868	TR 2SC2130 (F) (G)	45-1-317
5-TR18, 19	ET563905	TR 2SC711 (G) (H)	45-1-67
5-TR20 to 22	ET639437	TR 2SC945L (QA) (PA)	45-1-85
5-TR23	ET563905	TR 2SC711 (G) (H)	45-1-67
5-TR24, 25	ET328438	TR 2SB808-V (F) (G)	45-1-397
5-TR16, 17	ET328437	TR 2SD1012-V (F) (G)	45-1-396
5-D1	ED308945	D Silicon SVB 10-100 100/1.0A	45-2-82
5-D2	ED309357	D Silicon SVB 15-100 100/1.5A	45-2-83
5-D3	ED319167	D Zener H HZ6 C3	45-6-80
5-D4	ED329449	D Zener H HZ18 3	45-6-80
5-D5	ED560913	D Silicon V 1S2473VE	45-3-23
5-D6	ED306109	D Silicon W03B 100/1.0A	45-2-78
5-D7	ED560913	D Silicon V 1S2473VE	45-3-23
5-D9	ED306109	D Silicon W03B 100/1.0A	45-2-78
5-D11 to 14	ED560913	D Silicon V 1S2473VE	45-3-23
5-D18, 19	ED560913	D Silicon V 1S2473VE	45-3-23
5-D20	ED313846	D Zener H HZ16 3	45-6-80
5-D21 to 28	ED560913	D Silicon V 1S2473VE	45-3-23
5-VS1	MZ283140	△ Socket Selector X-17238 6P (U)	40-2-13
5-SW1	ES310839	△ SW Push SDG1P-E 01-1 E (U)	25-5-310
5-SW1	ES315159	△ SW Push SDG1P 01-1 J (J)	25-5-330
5-FR1	ER200972	△ R Fuse ERD2FC 1/4W 330J	35-14-31
5-R14	ER328480	R MOF SNP FS 1W 271J	35-11-21
5-R24	ER328480	R MOF SNP FS 1W 271J	35-11-21
5-C1	EC320548	△ C CE V F 103Z 250AC	24-5-112
5-C4	EC315966	C EC V CUT H 332M.16.0DC	24-12-46
5-C10	EC316230	C EC V CUT H 222M 35.0DC	24-12-46
5-C15	EC329415	C EC V F05 NP 04D 100M 100.0DC	24-17-31
5-C17	EC329415	C EC V F05 NP 04D 100M 100.0DC	24-17-31

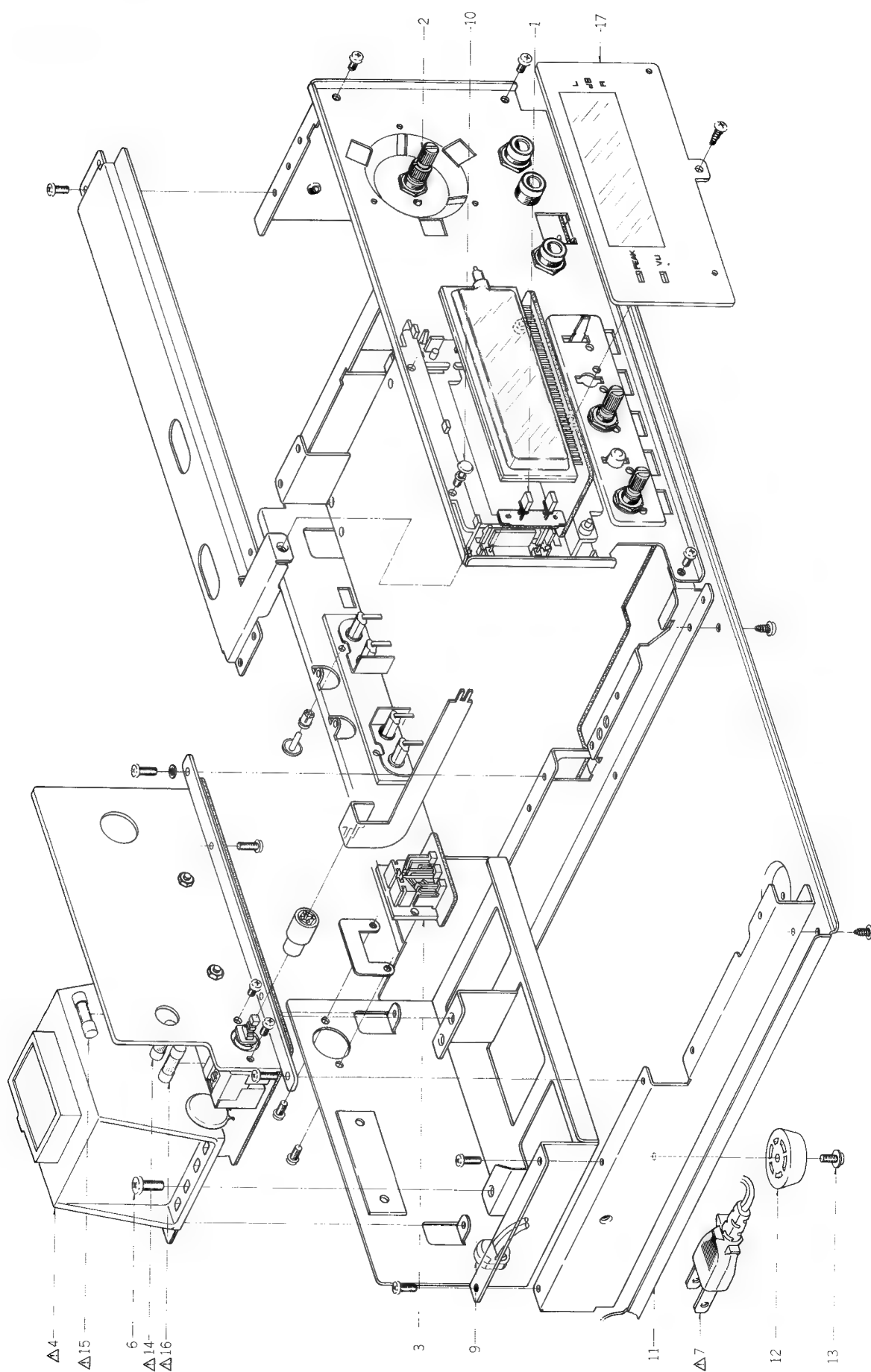
## 6. SYSTEM CONTROL P.C BOARD (CL-5007A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
6-1	BA329359	Syscon PC BLK GX-F35	
6-IC1	EI328407	IC LM6405A-012	45-8-507
6-TR1	ET328436	TR 2SA937 (Q) (R)	45-1-395
6-TR2 to 6	ET328435	TR 2SC2021 (R) (S)	45-1-394
6-TR7 to 12	ET328436	TR 2SA937 (Q) (R)	45-1-395
6-D1,2	ED316143	D Silicon H 1S2473HS F10	45-3-53
6-D3	ED317594	D Silicon H 1S2473HL F12	45-3-60
6-D4	ED560913	D Silicon V 1S2473VE	45-3-23
6-D5	ED316143	D Silicon H 1S2473HS F10	45-3-53
6-D6 to 9	ED560913	D Silicon V 1S2473VE	45-3-23
6-D10	ED316143	D Silicon H 1S2473HS F10	45-3-53
6-D11	ED560913	D Silicon V 1S2473VE	45-3-23
6-X1	EZ328406	OSC CE CSB400A 0.000400MC	53-1-207

## 7. BAR METER P.C BOARD (CL-5002) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
7-IND1	EM315859	IND FL FIP48CW16YS Graph	53-1-175
7-IC1	EI328409	IC LC7555	45-8-508
7-TR1,2	ET307349	TR 2SD794 (P) (Q)	45-1-334
7-D1	ED329058	D Zener H HZ5 C1	45-6-80
7-D2	ED328482	D Zener H 05Z10 L	45-6-76
7-D3	ED328481	D Zener H 05Z20 L	45-6-76

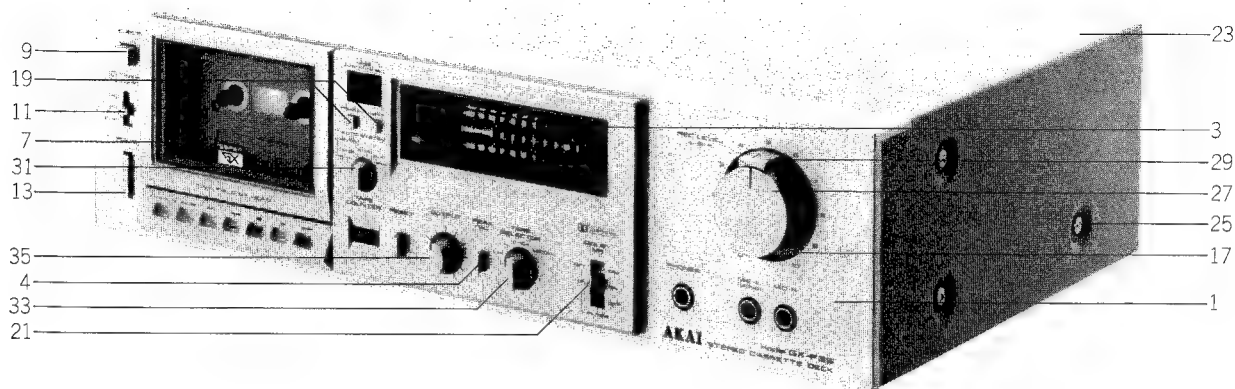
## 8. ASSEMBLY BLOCK



## ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.
<b>LED P.C BOARD BLOCK</b>			
8-1	ED318408	D LED GL-9NG2 GRN	45-15-35
<b>VR P.C BOARD BLOCK</b>			
8-2	EV329416	VR Rotary 16P11×OR 15A503	36-18-23
<b>REMO. CON. P.C BOARD BLOCK</b>			
8-3	EJ324276	DIN J TCS4680-01-111 P 8P	31-5-156
<b>POWER SUPPLY BLOCK</b>			
8-4	BT328401	△ Trans Power CLT-1 (U)	38-4-884
8-5X	BT328402	△ Trans Power CLT-2 (J)	38-4-885
8-6	ZS314702	ST BID40×10STL CMT	
8-7	EW306428	△ AC Cord 2 Cores KP-205A, VFF UCJ (U)	26-3-64
8-8X	EW306427	△ AC Cord 2 Cores KP-211, VFF J (J)	26-3-63
8-9	EZ631945	Strain Relief SR-4N-4	2-7-49
<b>ASSEMBLY BLOCK</b>			
8-10	ZW698308	RV NYL30×055 BL	2-7-54
8-11	SP328379	Bottom Plate	CL-5022
8-12	SA306240	Rubber Foot (B)	LE-6740
8-13	ZS313486	ST PAN30X06STL CMT C	
8-14	EF306949	△ Fuse TSC A Type 250V 1.25A (F1)	39-1-64
8-15	EF311839	△ Fuse TSC A Type 250V 1.60A (F2)	39-1-64
8-16	EF309389	△ Fuse TSC A 250V 0.40A (F3)	39-1-64
8-17	SZ328382	Filter	CL-6001

## 9. FINAL ASSEMBLY BLOCK



### FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.
<b>FRONT PANEL BLOCK</b>			
9-1	BD329395	Front Panel BLK GX-F35(U/T)	
9-2X	BD329397	Front Panel BLK GX-F35-BL(U/T)	
9-3	SZ321494	Meter Window	CE-6018
9-4	SB328383	Button (A)	CL-6003
9-5X	SB328384	Button (A-BL)	CL-6003
9-6X	ZG328385	Button Spring	CL-6004
9-7	BD329402	LID Panel ASSY GX-F35	
9-8X	BD329403	LID Panel ASSY GX-F35-BL	
<b>FINAL ASSEMBLY BLOCK</b>			
9-9	SB316316	Button (B)	CM-6305
9-10X	SB316317	Button (B-BL)	CM-6305
9-11	SK328391	Slide Knob	CL-6007
9-12X	SK328392	Slide Knob (BL)	CL-6007
9-13	SB316498	Button (B)	CU-6009
9-14X	SB316499	Button (B-BL)	CU-6009
9-15X	SE325784	Vol. Escutcheon	CY-6066
9-16X	SE329408	Vol. Escutcheon (BL)	CY-6066
9-17	SZ325776	Spin Plate	CY-6062
9-18X	SZ325777	Spin Plate (BL)	CY-6062
9-19	SK328389	IPSS Knob	CL-6006
9-20X	SK328390	IPSS Knob (BL)	CL-6006
9-21	SK328387	Lever Knob	CL-6005
9-22X	SK328388	Lever Knob (BL)	CL-6005
9-23	SP328471	Upper Cover (A)	CL-6020
9-24X	SP328472	Upper Cover (A-BL)	CL-6020
9-25	ZS315878	XST BID40×08STL NI3	
9-26X	ZS310588	XST BID40×08STL BNI	
9-27	SK325785	Double Knob (Upper)	CY-6067
9-28X	SK325786	Double Knob (Upper-BL)	CY-6067
9-29	SK325787	Double Knob (Lower)	CY-6068
9-30X	SK325788	Double Knob (Lower-BL)	CY-6068
9-31	SK317523	Knob (A)	CU-6017
9-32X	SK317524	Knob (A-BL)	CU-6017
9-33	SK316320	Knob (B)	CM-6307
9-34X	SK316321	Knob (B-BL)	CM-6307
9-35	SK315932	Knob (C)	CM-6308
9-36X	SK315933	Knob (C-BL)	CM-6308
9-37X	SP328467	Back Board (U-1)	CL-6017
9-38X	SP329410	Back Board (J-1)	CL-6017
9-39X	ZS329427	T2PAN30×10STL CMT TW	

# INDEX

Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
BA329359	6-1	ED328422	3-22	ES300099	4-SW6	EW306428	8-7	ZG312943	3-38
BA329383	5-1	ED328481	7-D3	ES310839	5-SW1	EZ328406	6-X1	ZG312945	2-12
BA329384	5-2	ED328482	4-D10	ES315159	5-SW1	EZ631945	8-9	ZG312946	3-10
BA329390	4-1	ED328482	7-D2	ES321266	4-SW4	HE321585	3-2	ZG312997	3-11
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BD329402	9-7	ED329449	5-D4	ES328414	3-23	HZ328307	3-6	ZG328305	3-5
BD329403	9-8X	ED560913	4-D16 to 18	ES328415	4-SW3	MB282104	2-11	ZG328352	3-51
BH329370	3-1X	ED560913	4-D23	ES328416	3-28	MB282778	3-17	ZG328361	2-2
BK328417	3-20	ED560913	5-D5	ES328430	3-39	MB328323	3-47	ZG328385	9-6X
BK328528	3-21X	ED560913	5-D7	ES328530	4-SW2	MB328324	3-58	ZG329433	3-27
BL328426	2-4	ED560913	5-D11 to 14	ET201580	4-TR24	MC328428	3-41	ZS302318	3-34
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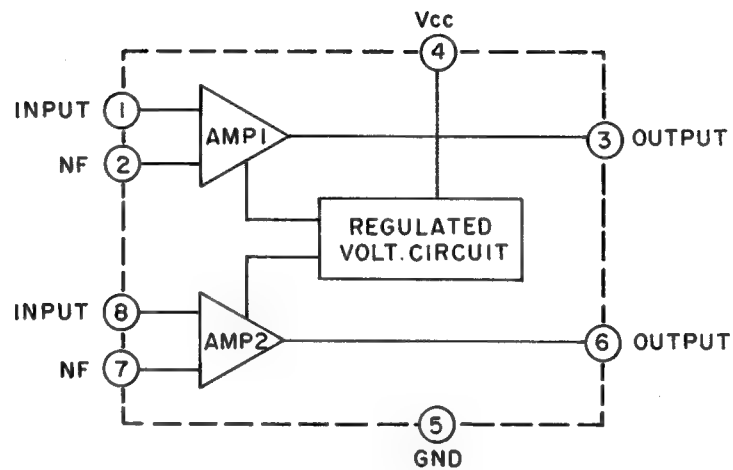


## SECTION 3

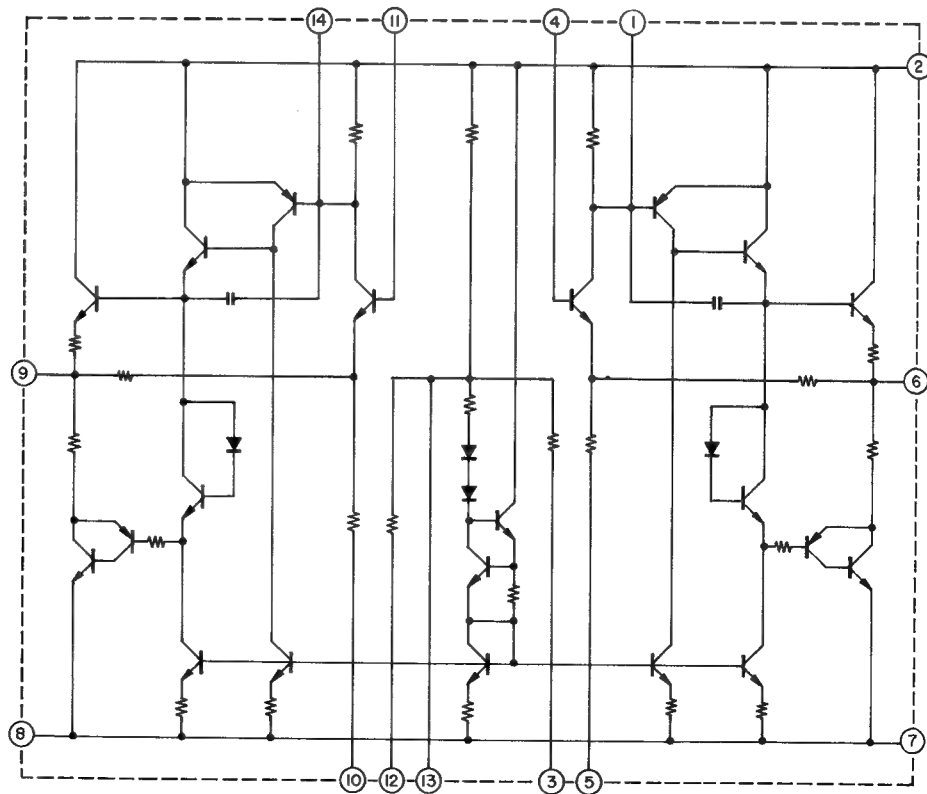
# SCHEMATIC DIAGRAM

1. SCHEMATIC DIAGRAM OF ICs
2. GX-F35 No2-1 1602056A AMP SCHEMATIC DIAGRAM
3. GX-F35 No2-2 1202057A POWER & SYS CON SCHEMATIC DIAGRAM

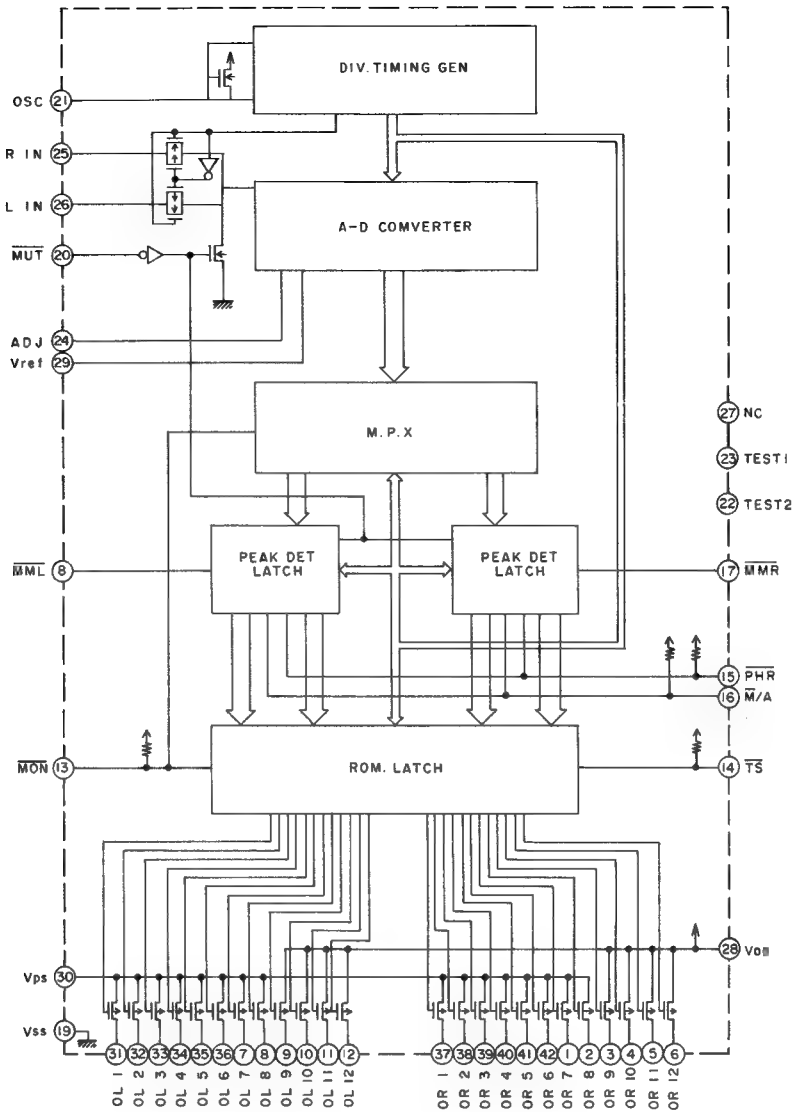
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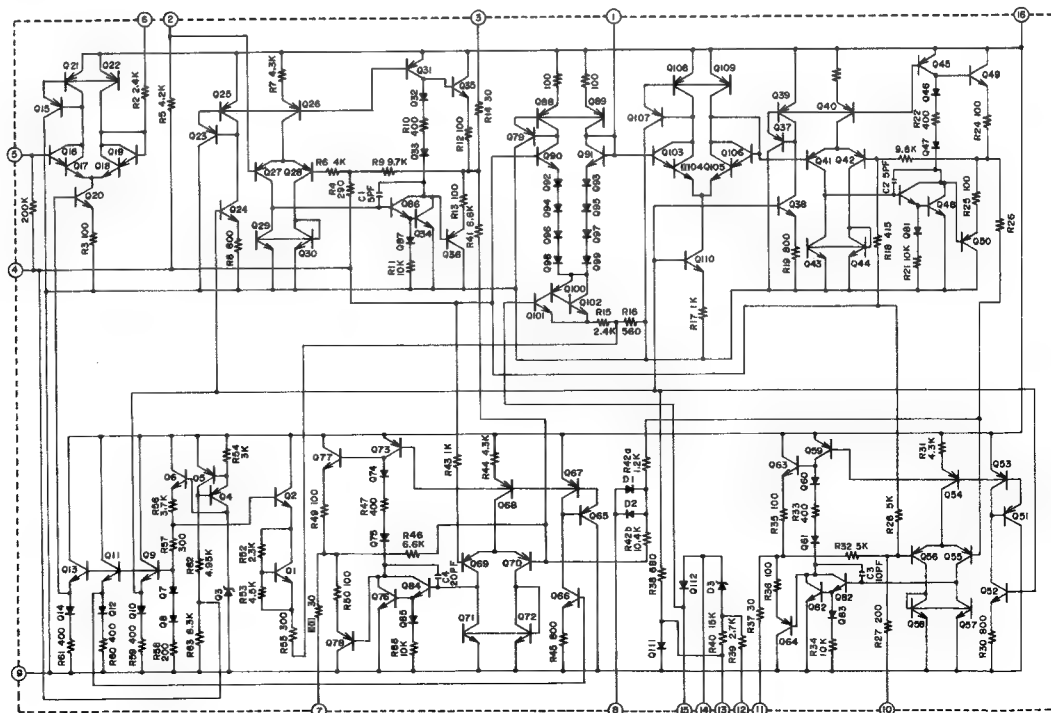
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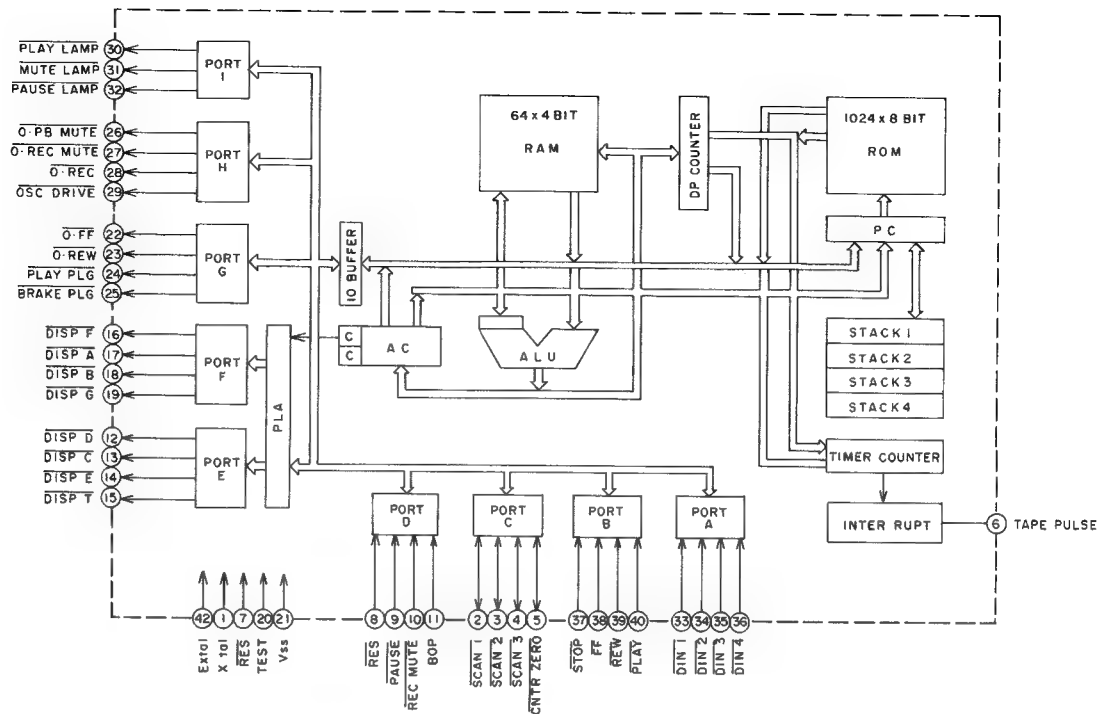
# LC7555



# NE545B



## LM6405A

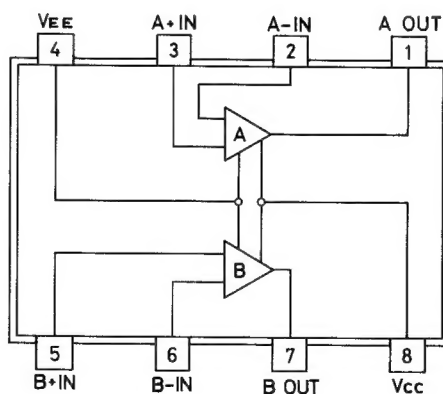


## LM6405A's Terminal Function

CATEGORY	PIN NAME	PIN NO.	FUNCTION
Operation Key Input	STOP	37	Stop Key Input . . . . . Input to stop action
	FF	38	FF Key Input . . . . . Input to order fast forward
	REW	39	REW Key Input . . . . . Input to order rewind
	PLAY	40	PLAY Key Input . . . . . Input to order play back
	REC	8	REC Key Input . . . . . Input to order recording, effective along with PAUSE or PLAY
	PAUSE	9	PAUSE Key Input . . . . . Input to order momentary stop
Mechanical Drive Output	REC MUTE	10	REC MUTE Key Input . . . . . Input to order no-signal recording (auto spacer input)
	O. FF	22	Signal so that it becomes L at FF . . . . . Output for reel motor and FF lamp drivers
	O. REW	23	Signal so that it becomes L at REW . . . . . Output for reel motor and REW lamp drivers
	PLAY PLG	24	Signal to make it L at PLAY or PAUSE . . . . . For plunger which pulls head
Amplifier Control Output	BRAKE PLG	25	Signal to make it L at FF, REW and PLAY . . . . . For plunger which releases brake
	O. PB MUTE	26	Playback mute output
	O. REC MUTE	27	Recording mute output
	O. REC	28	Output to change recording
Output to drive mode indicator lamps	OSC DRIVE	29	Output to drive bias oscillator
	PLAY LAMP	30	Output to drive PLAY lamp
	MUTE LAMP	31	Output to drive MUTE lamp
	PAUSE LAMP	32	Output to drive PAUSE lamp

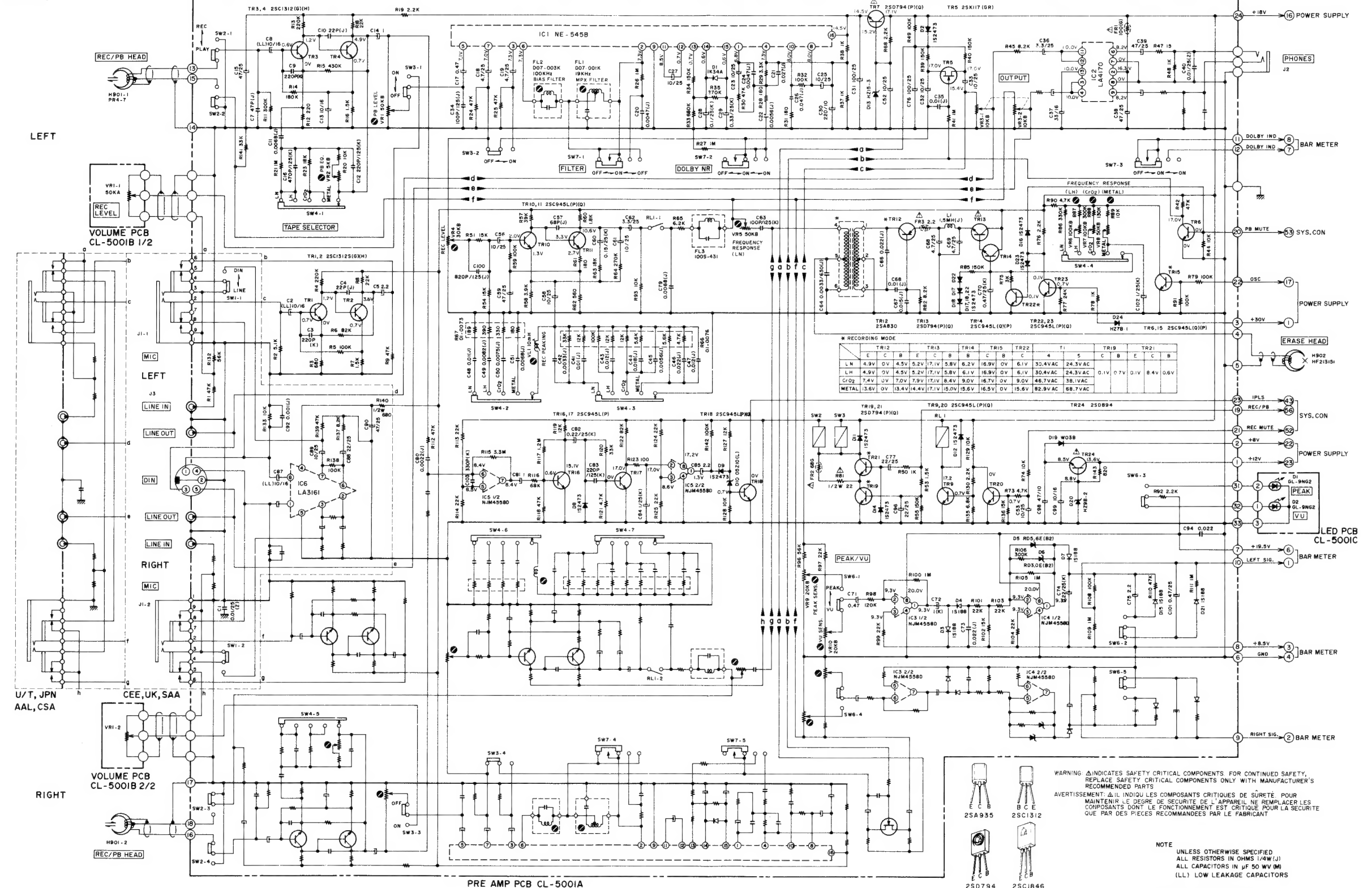
CATEGORY	PIN NAME	PIN NO.	FUNCTION		
Output for number of selections skipped by IPLS/ time of REC MUTE	DISP D	12			
	DISP C	13			
	DISP E	14			
	DISP T	15			
	DISP F	16			
	DISP A	17			
	DISP B	18			
	DISP G	19			
Auto function IPLS program clear	DIN 1	33	Input signal for key scan return	*Selects auto function when key scan output is added to key scan return signal input via diode. *Input SCAN 1 to DIN 1 – DIN 3 *Input SCAN 1 to DIN 4 . . . . . IPLS *Input SCAN 2 to DIN 1 . . . . . PROGRAM (input to set IPLS number of selection to skip) *Input SCAN 2 to DIN 2 . . . . . CLEAR (clear of IPLS selection number)	
	DIN 2	34			
	DIN 3	35			
	DIN 4	36			
	SCAN 1	2	Key scan output		
	SCAN 2	3			
	SCAN 3	4			
Others	CNTR ZERO	5	Counter 0 input signal		
	TAPE PULSE	6	Tape travel pulse input signal		
	BOP	11	Signal input between selections for IPLS		
Terminal for oscillator circuit	E X'tal X'tal	42 1	Occurence of standard signal for inside action		
Test terminal	TEST	20	Input to inside circuit (When used generally at 0 V)		
Power Supply	VDD	41	+ 5 V		
	VSS	21	0 V		

## NJM4558D





GX-F35



WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

NOTE: UNLESS OTHERWISE SPECIFIED, ALL RESISTORS IN OHMS (1/4W/1/2W). ALL CAPACITORS IN μF 50 WV (M) (LL) LOW LEAKAGE CAPACITORS.

**GX-F35 AMP**  
**SCHEMATIC DIAGRAM**  
 NO. 2-1 1602056A

